

American Aviation

*Ninth
Anniversary
Issue*

The Independent Voice of American Aeronautics

JUNE 1, 1946

The Trend is Good

ONE OF THE heartening trends noticeable throughout the recent convention of the American Association of Airport Executives at Chicago was the emphasis placed upon the need for non-aviation revenue to offset the increasing costs of airport operations.

The subject came up time and again during the meetings, all evidencing an awakening by those concerned with operation of airports to the revenue potential from other than aviation sources.

Particularly noteworthy was the excellent story of the Washington National Airport as told by Hervey

Law, its imaginative and able manager, and how non-aviation revenue has risen by leaps and bounds to share a large portion of the operating expenses of the airport. An increase in revenue to the airport from restaurants alone from \$60,000 two years ago to \$113,000 last year, and an estimated \$125,000 to \$150,000 this year, is an indication in itself that good restaurants will be patronized by the public and go far to pay the operating costs of the field.

Soon Hervey Law will build an office building, a hotel, a garage, and other revenue-producing facilities. In fact he intends to build a complete shopping center. This is an excellent demonstration of how an airport can become a self-supporting community center without placing the entire burden of cost upon the operators and the private and itinerant flyers using the field.

Now indeed, when federal aid is becoming available, is the time for wise planning to avoid the pitfalls of considering an airport to be merely a bit of acreage consisting of runways, hangars and a terminal and with revenue-producing drive-ins, restaurants and other business properties located across the street or across the road from the airport and contributing nothing to airport operation.

Although there have been some notable exceptions, too few airports have in the past tapped potential and legitimate non-aviation revenue sources. This can and must be corrected.

The alternative to developing non-aviation revenue is a genuine threat to aviation. Landing fees, heavy gas and other charges, will put a crimp in the business just at a time when many small operations have a chance to build into something substantial. Big airports cannot be maintained and operated properly from aviation sources alone. The community center idea being sponsored by Hervey Law is the answer.

(Turn to Page 6)

*Fortnightly
Review*



Elected President of Bendix

Malcolm P. Ferguson has been elected president of Bendix Aviation Corp., succeeding Earnest R. Breech, who resigned to become a vice president and director of the Ford Motor Co. Ferguson has been a director and vice president of Bendix.

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The Independent Voice of American Aeronautics

June 1, 1946



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International Aviation: A weekly newsletter of aviation trends and news in foreign countries. Published on Friday of each week and dispatched via first-class surface mail. Editorial representatives in foreign capitals. Subscriptions: \$100 one year (\$2 issues). Airmail delivery available at additional cost to cover postage. Service Bureau available to all subscribers. FRANK M. HOLZ, Managing Editor.

American Aviation Directory: Published twice a year, Spring and Fall. Complete reference data on administrative and operating personnel of airlines, aircraft and engine manufacturers, accessory and equipment manufacturers, organizations, schools, U. S. and foreign aviation groups and departments, etc. Completely cross-indexed by companies, activities, products and individuals. Single copy \$5.00. Fall-Winter 1945 issue now available. DAVID SHAW, Managing Editor.

American Aviation Traffic Guide: Monthly publication of airline schedules, rates and regulations for passenger and cargo transportation by commercial air transport. Supplements furnished subscribers covering changes occurring between issues. Subscriptions: U. S. and Latin America \$5.00 one year (12 issues and supplements); Canada \$5.50. All other countries \$6.50. Published and revised from editorial offices at 139 North Clark Street, Chicago 2, Illinois. (Telephone: State 2154). H. B. WHITNEY, Managing Editor.

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American Overseas Airlines—for which Boeing is building fleets of these super-transporters

Editorial

(Continued from page 1)

L. Welch Pogue

THE DEPARTURE of L. Welch Pogue from the Civil Aeronautics Board of which he has been general counsel and chairman is regretted by everyone who knew of his splendid work. Rarely has there been such a completely satisfactory and fair public servant, and the debt owed to him by aviation and the country is great. One may have differed with his opinions, but one never lost respect for him. His reputation has remained high from the moment he began working for the Board some years ago. Under his leadership a great deal of national aviation policy has been established and one can be deeply grateful that during this vitally important period of air transport development that a man of Pogue's caliber was chairman of the Board. His was a difficult task and he acquitted himself well. In his new private law practice he carries with him the almost universal good wishes of civil aviation in the United States. His successor, Jim Landis, has much to live up to.

TWA In Italy

WE THINK the Department of State was wise in sustaining its policy against monopoly by refusing to support the exclusive contract made by TWA to operate air services in Italy. The Department's solution to the

matter of assuming support to TWA on a non-exclusive basis was excellent and we believe it will be quite satisfactory to TWA. The point at issue was exclusivity. The solution leaves the way open for the British to operate an airline in Italy if the Italian government approves. It is understood the British are still trying to upset the TWA-Italian agreement, but the U. S. Government position is now clear and the Department of State should implement its own words with action in supporting TWA now that the exclusivity feature has been removed.

The Rails Begin to Move

THE NEW YORK CENTRAL Railroad began in May a new dusk-to-dawn freight service between New York and Buffalo that would indicate that the railroads are beginning to devote some attention to faster freight movements. Only a few years ago rail freight moved at about 11 miles an hour on the average and under the stimulus of war the railroads boosted this figure to over 16 miles an hour. Now the New York Central is to cover the 429 miles in scheduled time of 10 hours 50 minutes, with authorized train speed of 65 miles an hour with 75 cars or fewer. Average speed of the trains will be 39.6 miles an hour. But even with this substantial gain in speed it would seem that even the slowest cargo airplanes will have a margin of opportunity given any reasonable break in operating costs.

WAYNE W. PARRISH.

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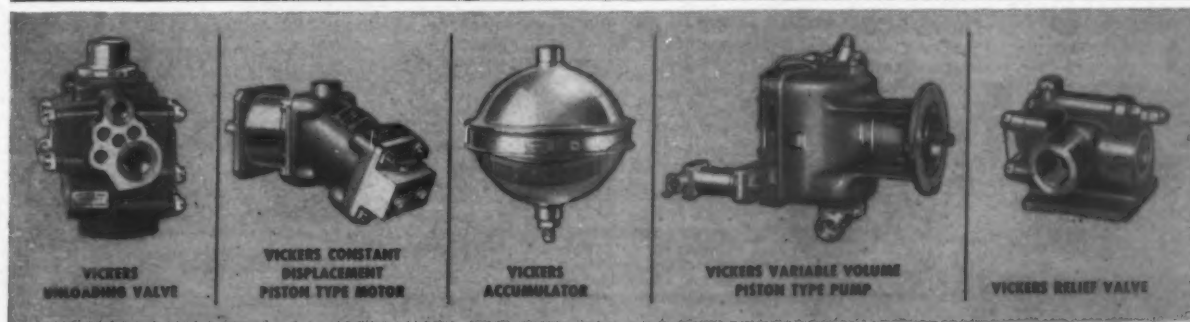
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Vickers Relief Valve, Unloading Valve, and Accumulator are used in the auxiliary flight control booster system. Relief Valve has a pilot operated piston resulting in smoother operation and greater accuracy. Accumulator has a very high volume/weight ratio. Write for Bulletin 45-41 for additional information.

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Letters

GCA Is Proven To the Editor:

No doubt you have heard from other sources all about ground control approach, or "GCA", where ships are stacked up like in ordinary holding procedures, but, unlike ordinary holding, they are "talked down" with the aid of radar, and thus a landing every two or three minutes is possible, depending on conditions, and the size of the ship being handled, i. e. turning radius, etc.

The thing that still amazes me is the fact that this system has been tried out by both the Army and the Navy, and found quite workable. When one takes into account the fact that the forces had to accept and train men for radio and radar assignments who knew little or nothing about this work, it is all the more remarkable that the system—GCA—worked so well. In view of the civilian ability to do things just a wee bit better, under peacetime conditions, it is still most puzzling to see this tried and proven adjunct to air traffic control still being talked about, being tested, and being considered for "certification."

I personally made several landings with this GCA assistance, and while not a pilot, I must say that I had a high degree of confidence in the setup; I feel that I am in a position to pass judgment—I have been flying the pond for over four years, and to quote an old adage, "seeing is believing." When the radar controller can see you, and the outline of your plane, in the cathode ray tube, that is good enough for me.

With personnel trained for this exacting work, and kept upon permanent assignment, might we not expect a higher degree of proficiency, such as our control tower operators

exhibit? I firmly believe that the surface has barely been scratched in this direction—that of applying our wartime lessons to our present day civilian flying applications.

The basic trouble seems to lie, not in the system itself, which is, admittedly not 100% perfect, but in the acceptance of what has gone before. The Army knows not what goes on in the Navy, and the CAA needs more time for "study" and "application." Yet the system is just as workable today as it was six months ago—there is very little difference between a civilian DC-3 and an Army C-47 . . . they both look alike on the cathode ray screen of the GCA, and both can be "talked down" with equal facility.

NEIL A. JOHNSON,
Flight Radio Officer,
Mount Vernon, N. Y.

Action Commended

To the Editor:

At the last meeting of the club the membership unanimously passed a resolution commending the *AMERICAN AVIATION* magazine for its stand for private flying as expressed in the editorial appearing in the April issue.

We greatly appreciate any action that is aimed at making better flying conditions for the private flier and hope that you will keep up the good work.

WENDELL O. AMES,
Secretary-Treasurer,
St. Joseph Valley Aviation Club, Inc.,
Niles, Michigan.

Books

THE STORY OF THE HELICOPTER. By Devon Francis. Illust. 182 pp. Concord-McCann, Inc., New York. \$3.00.

THE HOW OF THE HELICOPTER. By Alfred H. Stevens, Jr. Illust. by Ernest Stock. 58 pp. Cornell Maritime Press, New York. \$2.00.

Here are two fine books on the helicopter and it is a pity, in a sense, that they could not be combined under one cover. Each has its own approach to this new and intriguing machine and each is worthy in its own right.

Mr. Francis has done a most creditable job. As a newspaperman and writer he has avoided the usual pitfalls of over-dramatization experienced by most of his clan in dealing with a naturally spectacular subject. His painstaking research shows up well. He has included much original material and some original photographs. It would be a great mistake to look on this book as a slap-happy rewrite job by a lay writer. Mr. Francis has done a sound, thorough and absorbing job of telling the story of the helicopter. It is one book that will be read alike by aviation professionals and laymen—a tribute in itself.

Of particular interest are the stories about Thomas Edison, the late Emile Berliner and his brilliant son Henry A. Berliner, and Harold Pitcairn, in their early interest in the helicopter. It also can be said that Mr. Francis has done an original and interesting story on Igor Sikorsky; somehow it fits into its proper perspective better than other attempts.

For the layman Mr. Francis does an excellent job of analyzing the future of the helicopter and placing it into its niche beside the fixed-wing airplane. Although he deals with a machine that flies, Mr. Francis never permits his analysis to get off the ground. Perhaps in delving into the four decades of struggles to develop a helicopter Mr. Francis realized more than ever how long a task it is to develop a simplified flying machine for the average person to use.

Mr. Stevens, on the other hand, has done an equally fine job of explaining what the helicopter really is. The illustrations by Mr. Stock are masterful. The book is designed for juveniles but it would be a big mistake to try to restrict the audience to young people. It is a masterpiece of brevity and is evidence of genuine writing excellence. Not only juveniles need to know the real "how" of the helicopter, and what distinguishes this machine

Wings of Yesterday

Fifteen Years Ago

Air Mail service was inaugurated by Northwest Airways, Inc., between Fargo and Mandan, North Dakota. (June 2, 1931).

Lieut. de Vaisseau Paris and M. Gonord established closed circuit distance record for seaplanes of 3-113,816 miles at Arachon, France. They flew a Latecoere 28-3, equipped with a Hispano-Suiza motor. (June 4-5, 1931).

Lieut. de Vaisseau Paris and M. Gonord, flying a Latecoere 28-3 equipped with a Hispano-Suiza motor, established duration record for seaplanes of 36 hours, 57 minutes at Arachon, France. (June 4-5, 1931).

The Annual F. A. I. Congress was held at Bucharest, Rumania. (June 6-14, 1931).

Joseph Le Brix and Marcel Doret, flying a Dewoitine equipped with a Hispano-Suiza motor, established a closed circuit distance record of 6,444,881 miles at Istres, France. (June 7-10, 1931).

Pennsylvania Airlines, Inc. extended air mail service from Pittsburgh, Pennsylvania to Washington, D. C. (June 8, 1931).

Mrs. May Halzlip established women's altitude record for light airplanes of 18,097 feet at St. Clair, Michigan. She flew a Buhl Bull Pup equipped with a Szekeley motor. (June 13, 1931).

Twenty-five Years Ago

Aeromarine Airways transported 1044 passengers with baggage and mails between Key West and Havana in six months. Intercity flying boat service was started at New York. U. S. Weather Bureau started issuance of daily flying weather bulletins. (June 1, 1921).

National Aeronautical Congress met at Turin, Italy. (June 6-8, 1921).

Lt. Alex. Pearson, U.S.A.S., made an aerial survey of the Grand Canyon of Arizona. (June 10, 1921).

First Sergeant Luis Barrufo, an Argentine, broke the South American altitude record, ascending 24,272 feet. (June 10, 1921).

Lt. R. C. Moffat, U.S.A.S., won the Hamilton Memorial Trophy Race, Hartford, Conn.—Springfield, Mass. (June 11, 1921).

Georges Kirsch, in a Nieuport, reached altitude of 32,153 feet in France. (June 14, 1921).

Mooring mast for airships was operated in Pulham, England. (June 14, 1921).

from the autogiro and fixed-wing planes. By reading Mr. Stevens' book first and following up immediately with Mr. Francis' more comprehensive treatment, the reader will be left with about as complete and sane a conception of helicopters as the most crusading aviation enthusiast could desire.—W. W. P.



The first complete story
of aviation's ugly duckling

The Story OF THE Helicopter

By DEVON FRANCIS

A fascinating account of the evolution of the helicopter from a Renaissance dream to a present-day reality. Mr. Francis, a pilot and former aviation editor of the Associated Press, describes the tragic failures and exciting successes of the men whose imagination and genius developed rotary flying—Sikorsky, Berliner, D'Ascanio, Clerve, Edison and dozens of others. In simple, lucid terms, he explains the flying principles of helicopters, the "bugs" yet to be eliminated, the part helicopters will play in our lives, and what they will cost to buy and operate. Illustrated with photographs.

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Another time these testers purposely threw dirt and water into the oil lines of the hydraulic booster system, forcing it to work under what they understand as "adverse conditions." Adverse, that is.

They even kicked around a whole tail control assembly in a chamber that was 70 degrees below zero (Fahrenheit) until all the low-temperature bugs had been licked.

As a result of this kind of highly creative destruction, which goes on at Lockheed year in and year out, the *Constellation* is the most advanced and safest transport in service today.

L to L for L

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Background

(Significant Developments and Events)

Aftermath of Latin American Case: One of the greatest crops of rumors in the history of aviation has surrounded the Latin American route case ever since it has been under consideration by CAB and the various Government departments required to pass upon international awards. CAB, in the opinion itself and in its press releases, went to considerable pains to point out explicitly the alterations in its original awards which were ordered by the President under authority given him by the Civil Aeronautics Act. This is the first time such a step has been taken by the Board. The original decision of the Board contained the dissenting opinions of minority members on the various phases of the awards where there were disagreements. Since dissents against the presidential viewpoint were inappropriate in the final opinion, that document meticulously listed the vote of each Board member on the various individual awards. However long it took to bring the decision out, and however subject it was to pressures in its rounds of the approving agencies, the Latin American decision is destined to stand. General opinion of airline attorneys is that no court would consent to review a case in which presidential discretion was involved to such an extent.

Order of DC-6 Deliveries: Commercial deliveries of the Douglas DC-6 are expected to be started in July. The first plane will go to the CAA for flight tests and Douglas hopes to have a certificate by the time the first commercial delivery is ready. The second plane will be flown to Europe for demonstrations. Then the first actual commercial delivery of a DC-6 will be made to United Air Lines, followed almost simultaneously by one to American. Subsequent deliveries will be one every two weeks for both United and American. Later on, other customers will break into the schedule.

Some Red Tape Removed: Flyers bound for Central America and the Caribbean will be pleased to know that the U. S. has finally, many months after V-J Day, simplified the regulations. Border permits may now be obtained smoothly and easily, we are informed, although all of the other red tape hasn't yet been removed. . . . Central American countries eased transit red tape materially some months ago.

Airport Executives on Upgrade: An encouraging sign is the way the American Association of Airport Executives is getting underway after wartime lull. Pat Moore, Association secretary and alert and personable manager of Peoria, Ill. airport, worked long and hard to arrange the recent Chicago convention which proved to be highly profitable to all concerned. Few aviation meetings in many years have produced such healthy discussions. This organization should increase in stature and importance.

Notes on Planemakers and New Planes: Engineering and Research Corp. is readying something new to go along with its Eroupe. It will be a five-place, two-engine, pusher plane which is coming along rapidly although the company isn't ready to talk about it yet. . . . Boeing Aircraft also has its finger in the personal plane picture, is working on one, but has no definite plans for it yet. . . . Cessna, now building 11 planes per day with a goal of 20 per day by July 1, has given a 10c per hour wage increase to 1,200 employees. . . . Layoffs at Beech last fortnight started rumors that a number of orders for its twin-engine executive transports had been cancelled. . . . V.P. and General Manager John P. Gaty explained there had been no order cancellations, but that some 25% of the employees had been laid off temporarily because of shortages created by strikes in other industries. . . . Strike news at other plants: Bellanca's New Castle, Del. plant halted production following a walkout of 450 employees seeking 18½c increase. The company had offered 10c and agreed to other union proposals. . . . Fairchild had to get an injunction to restrain pickets at its East Farmingdale, L. I. plant from interfering with its non-striking workers. . . . The long-drawn-out strike at Consolidated Vultee's San Diego plant ended without having materially affected progress on the Model 240 medium transport on which the company holds orders for 120. . . . Striking machinists returned to work on the company's terms, accepting a 15% wage increase and sacrificing the joint wage review which led to the strike call Feb 3. . . . During the week before the strike ended, the payroll had gone up to about 2,400 of the pre-strike figure of 3,500.

PCA Name Change: PCA plans an eventual change of corporate name from Pennsylvania-Central Airlines to Capital Airlines, but the change will not be made immediately. The company is now undertaking a transitional program, emphasizing Capital Airlines and subordinating PCA. Capital Airlines will be painted on airplanes, and company news releases now carry the name "PCA (Capital Airlines)".

Aviation Personalities: One of the happiest men in aviation is Robb C. Oertel, manager of aviation sales for Standard Oil of New Jersey . . . in one of those rare switches of big airline gas accounts, Oertel landed Delta Air Lines. It was Delta's first switch in ten years . . . Two airline men who deserve more credit than they've received for tireless work on complex airport problems are D. Walter Swan of United and Bob Wilson of PCA. . . . A few issues ago we mentioned new air transport magazines in England and referred to a monthly department in *The Aeroplane* . . . what we should have said was that *Air Transport and Airport Engineering* is a full-fledged journal of its own and published by The Temple Press which also publishes *The Aeroplane*. John Longhurst is editor of the new publication, now about seven or eight months old, and is doing a good job as might well be expected from his association with *The Aeroplane*.

Boeing's Personal Plane: Boeing Aircraft Co. has done some engineering work on a personal airplane but will do nothing further with it at this time. Company plans to watch future developments.

Internal Troubles: The resignation recently of three top airline traffic men (Charlie Rheinstrom, v.p. of American; Walter Sternberg, g.t.m. of Eastern, and Tom Wolfe, v.p. of Western), is symptomatic of general unrest and the pains of readjustment, plus rapid growth, within the industry. Sharp conflicts in policy have appeared in most companies and nerves have become ragged by the long war years combined with a tremendous increase in organizations. Newcomers into the industry have contributed to the situation, too, as would be inevitable. It hasn't been easy to manage airlines. Meanwhile for sentimental and other reasons there are many who hate to see the current changes occurring.

The B-35 Cause Celebre: The uproar between Northrop Aircraft and Popular Science Magazine over the latter's breaking of the B-35 story prior to the May 1 release date, is still going hot and heavy with virtually all publications, writers and news services participating one way or another. It has become a cause celebre and the incident isn't closed yet.

Short Aviation Observations: Canadair Limited of Montreal plans the first flight tests of its Canadian-built, Rolls-Royce powered DC-4 sometime in June. . . . The International Association of Machinists has bought a five-passenger Cessna for use of its labor representatives in the aircraft construction and transport industry. . . . AAF officers will have more important posts on the General Staff level when an Army reorganization plan goes into effect June 11. . . . A special reorganization board has recommended giving the AAF half of the General Staff assignments. . . . All American's Air Pick-Up service observed its seventh anniversary on May 7 with an impressive record. . . . Out of the subsidy class for three years, it was able to show that air mail dispatched via Air Pick-Up last year produced estimated postal revenues of \$1,200,000 as compared with \$640,000 mail pay received by the company. . . . AAA's record is responsible for CAB's award on May 23 in the West Coast case of certificates to Southwest Airways and West Coast Airlines for combination passenger and pick-up services when a plane which can be certificated for that dual purpose is available. . . . First issue of the monthly *Aircraft Dealer*, trade magazine for dealers and distributors of aircraft and accessories, published in Des Moines, made its appearance in May under the imprint of Arthur Boreman's well known publishing company, with Kenner and Charles Boreman as co-publishers. . . . Asa Rountree's Alabama Department of Aeronautics (Montgomery 5, Ala.) is distributing a new directory of Alabama airfields.—CLIFFORD GUEST



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Seven Lines Get Latin American Routes

President Modifies Board's Original Decision To
Extend U. S. Carriers to South America and Bermuda

By DANIEL S. WENTZ, II

UNPRECEDENTED Presidential modification of the original conclusions of the Civil Aeronautics Board in the long-awaited Latin American Case was re-

vealed last week as the Board announced its decision nominating seven additional airlines to carry the U. S. flag to Latin America, the Caribbean and Bermuda in competition with Pan American Airways.

The opinion showed that Harry S. Truman had intervened to send an additional U. S. carrier to Buenos Aires and Rio in competition with Pan American and Panagra; that he had directed that Western Air Lines instead of Pan American be given a Los Angeles-Mexico City route; that he had ordered the extension of Eastern Air Lines non-stop from Miami to San Juan, Puerto Rico; and that he had called for a second U. S. company to compete with PAA and British Overseas Airways Corporation between New York and Bermuda.

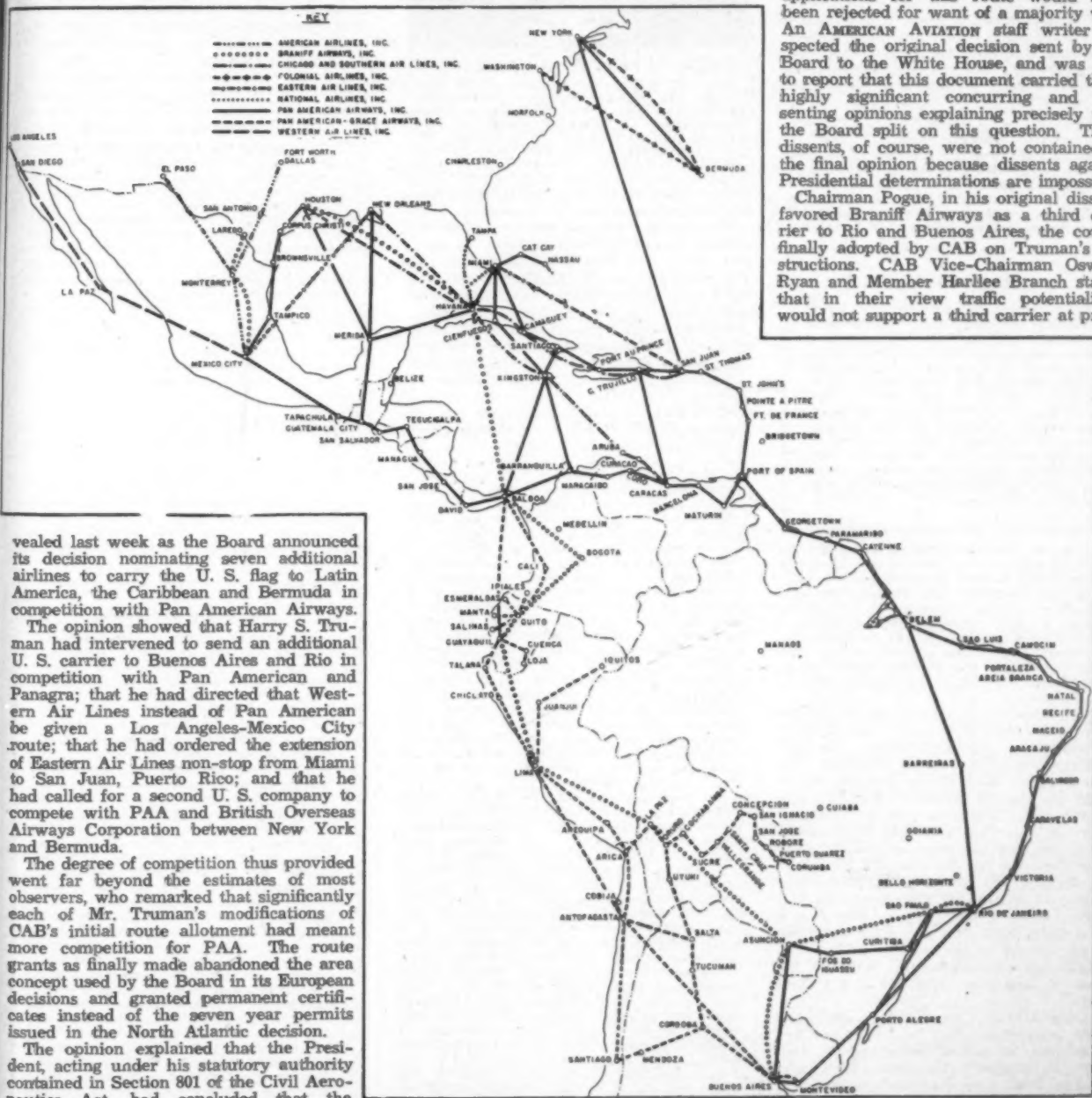
The degree of competition thus provided went far beyond the estimates of most observers, who remarked that significantly each of Mr. Truman's modifications of CAB's initial route allotment had meant more competition for PAA. The route grants as finally made abandoned the area concept used by the Board in its European decisions and granted permanent certificates instead of the seven year permits issued in the North Atlantic decision.

The opinion explained that the President, acting under his statutory authority contained in Section 801 of the Civil Aeronautics Act, had concluded that the

tailed explanation of the changes ordered by Truman, as well as the Board's original views was almost wholly without precedent in CAB opinions.

According to the opinion, the Board was equally divided on the problem of additional trunk-line service through Latin America to Buenos Aires, and in the absence of Presidential intervention, all applications for this route would have been rejected for want of a majority vote. An AMERICAN AVIATION staff writer inspected the original decision sent by the Board to the White House, and was able to report that this document carried three highly significant concurring and dissenting opinions explaining precisely why the Board split on this question. These dissents, of course, were not contained in the final opinion because dissents against Presidential determinations are impossible.

Chairman Pogue, in his original dissent, favored Braniff Airways as a third carrier to Rio and Buenos Aires, the course finally adopted by CAB on Truman's instructions. CAB Vice-Chairman Oswald Ryan and Member Harilee Branch stated that in their view traffic potentialities would not support a third carrier at pres-



ent. They felt that "destructive competition" might flow from any further dilution of Latin American traffic. To provide competitive services without adding a third carrier, Branch and Ryan favored asking Congress for appropriate authority to split the PAA-W. R. Grace & Co. deadlock in Panagra in order to make it genuinely competitive with Pan American. Member Josh Lee's dissent proposed a Houston-Lima route for Braniff plus the extension of Eastern Air Lines to the Canal Zone and the extension of Chicago and Southern from Caracas, Venezuela, to Rio, Buenos Aires, and Montevideo.

When the President resolved this deadlock by calling for a third U. S. Carrier to Argentina, Brazil and Uruguay, the Board concluded that Braniff would be in the best position to tap central and western U. S. traffic, and to provide sound competition with Panagra along South America's West Coast. It also pointed out that by routing Braniff from Houston through Havana, it could connect with National in the Cuban capital to provide an additional competitive outlet for East Coast U. S. travellers to Latin America.

The certificate granted Braniff the right to operate between the terminal point Houston, Tex., the intermediate points Havana, Cuba; Balboa, Canal Zone; Bogota, Colombia; Quito, Ecuador; Guayaquil, Ecuador; Lima, Peru; La Paz, Bolivia; Asuncion, Paraguay, and (a) beyond Asuncion, the intermediate point Sao

Slight Mix-Up

Early copies of the Board's Latin American Decision caused considerable eyebrow raising in airline circles. By a freak clerical error they contained specimen copies of a certificate for the Los Angeles-Mexico City route, made out to Western Air Lines and also to Pan American. A hurriedly-prepared order, issued a day later and carrying the approval of President Truman, hastened to explain that the twin certificates were included by inadvertent clerical error, and that the certificate issued to Pan American was worthless.

Paulo, Brazil, and the terminal point Rio de Janeiro, Brazil; and (b) beyond Asuncion the terminal point Buenos Aires, Argentina, subject to the condition that Havana shall be served only in flights originating or terminating at points in South America. Braniff also received a certificate for service between the co-terminal points San Antonio, Tex., and Laredo, Tex., the intermediate point Monterrey, Mexico, and the terminal point Mexico City, Mexico.

In passing, the Board reviewed briefly the abortive efforts it had made to spur competition in Latin American through bringing Panagra to a U. S. terminal. The opinion stated inferentially that the Board would be glad to entertain such an application from Panagra, but said that all efforts in this direction had been deadlocked because of "the unhealthy condition existing in the internal affairs of that company by reason of its joint ownership and control by Pan American and W. R. Grace & Company." The Board stated flatly that "we feel that the joint owners should in the public interest cooperatively enable Panagra to apply for access to the east coast of the United States."

On the Mexico City route question, the Board explained that its original decision was to award the route to Pan American under a two year certificate. Member Josh Lee dissented in favor of certificating Western Air Lines to Mexico



TACA Vice President—

Philip M. Wilcox, vice-president of the Fred Olsen Line Agency, American representative of the Norwegian Airline (DNL) and a former vice-president of United Air Lines, has been elected vice-president of TACA Airways. He will administer financial, legal and planning activities.

City. Under the President's instructions, the route was given to Western.

The Board's original determination with respect to the Bermuda service, the opinion states, was that a second carrier was not needed to handle traffic between New York and Bermuda now carried by PAA and BOAC, but that a direct Washington-Bermuda service would fill a real public need. After reversal by the President, the Board concluded that Colonial Airlines, which it had originally chosen to operate from Washington to the islands, would also be the best choice for the additional New York-Bermuda carrier.

Likewise, the Board originally found that additional Miami-San Juan service was not required, although Member Lee dissented in favor of National Airlines for the route. Truman ordered that a Miami-San Juan nonstop route be given to Eastern Air Lines. Eastern also received a certificate authorizing service between New Orleans and Mexico City.

To Chicago and Southern Air Lines went a certificate for a route from the co-terminals Houston and New Orleans to San Juan, P. R., via Havana, Camaguey, Cuba, Port-au-Prince, Haiti, and Ciudad Trujillo, D. R. A second leg extends from Havana to Caracas, Venezuela, via Kingston, Jamaica, and Aarba and Curacao, Netherlands West Indies.

National Airlines received a route between Tampa and Miami as co-terminals and Havana.

American Airlines' temporary Mexico City extension was made permanent. This route extends from the Mexican capital to Monterrey, whence one leg branches westward to El Paso and the other extends to Fort Worth-Dallas via San Antonio.

Pan American received a prize route between New York and San Juan direct, plus a permanent certificate for its New Orleans-Merida-Guatemala City service with Houston being made a co-terminal with New Orleans.

In addition, it was authorized to extend its route from Brownsville, Texas, to Houston via Corpus Christi, with a restriction against hauling local traffic. By amendments of its existing certificates PAA was authorized (1) to serve Santiago in lieu of Antilla between Camaguey, Cuba, and Port-au-Prince, Haiti, (2) to serve Sao Paulo, Brazil, between Rio de Janeiro and Porto Alegre, Brazil, (3) to carry mail between Port-au-Prince, Haiti; Santiago, Cuba; and Kingston, Jamaica; (4) to serve Balboa in lieu of Cristobal, Canal Zone, and (5) to serve Caracas in lieu of La Guaira, Venezuela.

Pan American-Grace, Inc., (Panagra was authorized (1) to operate nonstop service between Balboa, Canal Zone, and Buenos Aires,

Argentina, via intermediate points Guayaquil, Ecuador; Lima, Peru; and Antofagasta, Chile. By amendment of its certificate, Panagra was authorized to engage in air service between Buenos Aires, Argentina, and Montevideo, Uruguay, subject to the condition that flights serving Montevideo shall originate or terminate at Santiago, Chile, or points north thereof, or at Salta, Argentine, or points north thereof. Further amendment of Panagra's certificate permits service to Balboa in lieu of Cristobal, Canal Zone.

The decision cannot be interpreted as anything but an extremely serious blow to the prospects of shipping companies seeking to enter airline operations. Applications by such companies were unanimously rejected by the Board solely on their merits, and not under the controversial Section 408 of the Civil Aeronautics Act. Furthermore, President Truman's failure to modify any of the Board's decisions respecting surface carriers seem to mean that CAB's stand has at least tacit Presidential approval. The sections of the Latin American opinion relating to steamship applicants serve warning that the Board intends to keep shipping companies out of the air unless Congress changes the existing policy declarations of the Civil Aeronautics Act.

By treating the steamship applications wholly on their merits and comparing them with airline applications on an equal footing, the Board has seriously weakened the contention of the shipping interests that they were being kept out of the air under a legal technicality.

The entire problem of surface carrier participation apparently seemed to the Board to be of such seriousness as to warrant a fresh review of CAB's criteria for selecting carriers. In discussing these criteria, the Board said it proposed to grant new services to companies whose primary loyalty lay in developing air transportation to the utmost, and that airline applicants, being wholly devoted to the development of air transportation, had the most to offer in fulfilling the competitive and developmental objectives of the Civil Aeronautics Act.

The Board likewise concluded that an independent air carrier would be able to provide more vigorous competition than would a steamship carrier, saying, "It would be expecting too much to assume that a transportation company engaged in both air and sea transportation would be in a position to provide vigorous competition between its air transportation and its surface transportation on this route."

Acquisition Approved

Simultaneously with its announcement of the long-awaited Latin American Decision, the Civil Aeronautics Board issued an opinion in the Aerovias Braniff Acquisition Case (Docket 1360), disapproving the acquisition of the Mexican airline by Braniff Airways but approving the acquisition of Aerovias by T. E. Braniff as an individual.

The Board's approval of the acquisition by Braniff himself carried the condition that approval remains effective "only so long as Braniff Airways shall refrain from entering into any contract, agreement, or lease with or for the direct or indirect benefit of Aerovias Braniff, S. A., without first obtaining our approval thereof." The Board said it was placing this condition on the acquisition because "The existence of Mr. Braniff's control over Braniff Airways . . . could conceivably lead to a use of that carrier's economic resources for the support of Aerovias," a situation which might become a drain on Braniff Airways financial position "with possible resultant impairment of that company's ability to provide service in this country or with an increase of the burden upon the Federal Government in the form of mail compensation."

Need For Combination Pickup, Passenger Service Stressed

No Equipment Limitations

The Board added that there would be "no limitation in these certificates with respect to the type of equipment to be utilized and it will therefore be possible under these certificates for the carrier so authorized to put into operation a combination pickup passenger plane when such a plane is duly certificated." "It is our hope," the Board added, "that the fullest experimentation of this type of operation will be carried on in this area."

The selection of Southwest Airways, which proposes combination service, over the Ryan Aeronautical Co., whose plans were for pickup only, was expressly predicated by the Board upon the view that combination service through its greater flexibility, offered more public benefit in relation to its probable cost to the government than did pickup service alone.

Southwest received a certificate authorizing mail, passenger and property service between Los Angeles and San Francisco via Oxnard-Venture, Santa Barbara, Santa Maria, San Luis Obispo, Coalinga, Monterey, Santa Cruz, and San Jose, Calif.; between San Francisco and Medford, Oreg., via Vallejo, Sacramento, Marysville, Chico, Red Bluff, Redding, Dunsmuir, and Yreka, Calif.; and between San Francisco and Medford, Oreg., via Santa Rosa, Ukiah, Fort Bragg and Eureka, Calif.

West Coast Airline, with headquarters at Seattle, is headed by Nick Bos, President and owner of 25 percent of the company's stock. Bos formerly operated a scheduled airline and successful charter service in Alaska. The company was given a three-year certificate to operate between Medford and Portland, Oreg.; via Grants Pass, Roseburg, North Bend-Mannfield, Eugene, Albany-Corvallis and McMinnville, Oreg.; between Portland, Oreg., and Seattle, Wash., via Kelso, Chehalis, Olympia and Tacoma, Wash.; between Portland, Oreg., and Seattle, Wash., via Kelso, Wash., Astoria, Oreg.; Aberdeen-Hoquiam, Olympia and Tacoma, Wash.; between Seattle and Port Angeles,

Wash., via Port Townsend, Wash.; and between Seattle and Bellingham, Wash., via Everett, Mt. Vernon and Anacortes, Wash.

The third new carrier, Empire Air Lines, is headed by Albert L. Zimmerly of Lewiston, Idaho. The company was selected over other applicants because of Zimmerly's extensive experience as a local operator in the Idaho area. Routes assigned to Empire Air Lines run between Idaho Falls and Boise, Idaho, via Pocatello, Burley, Twin Falls and Gooding, Idaho; between Boise, Idaho, and Spokane, Wash., via Ontario, Baker, La Grande and Pendleton, Oreg.; Walla Walla, Wash., Lewiston-Clarkston, Pullman-Moscow and Coeur d'Alene, Idaho.

In all cases the certificates granted are valid for a three-year period beginning six months after the date the certificate is issued or the date operations are commenced, whichever ever is later.

In addition to the majority decision signed by CAB Chairman L. Welch Pogue and Board Members Ryan and Branch, Member Josh Lee filed a concurring and dissenting opinion in which he asserted that the companies certificated should have been given stronger terminal points than those selected by the Board. He

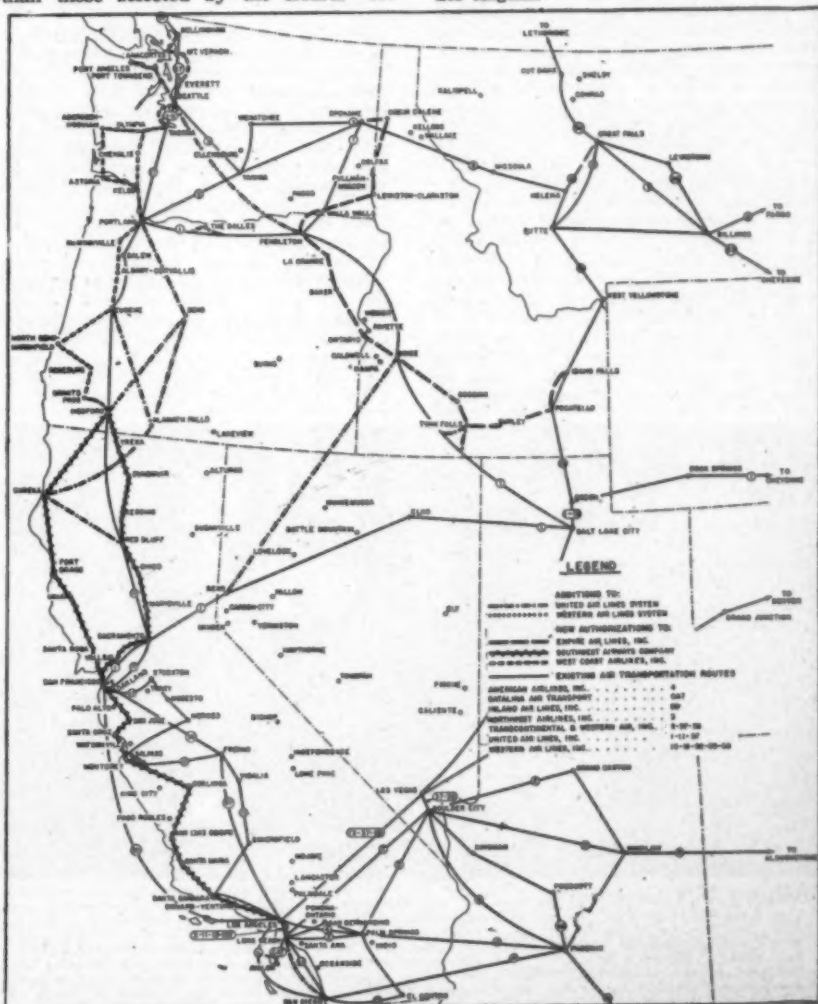
suggested that Empire Air Lines should have been given access to Salt Lake City, Seattle and Portland in addition to Spokane, and that West Coast's southern terminus should have been San Francisco instead of Medford, Ore.

Lee also held that the isolated geographical situation of the Sierra-Nevada and Salt Lake Basin region called for the certification of Nevada-Pacific Air Lines, whose application was rejected.

In amendments to the existing certificate of trunk-line carriers, the Board authorized United Air Lines to operate directly between Pendleton, Ore., and Seattle; to add The Dalles, Ore., and Twin Falls, Idaho, as intermediate points on Route 1; and to fly direct between Boise, Idaho, and Reno, Nev. United's certificate for Route 11 was amended to include Salinas and Eureka, Calif., and Klamath Falls and Bend, Ore., as intermediate points, and Long Beach, Calif., as a co-terminal point with Los Angeles. Member Lee disagreed with the award of the new intermediate points to UAL, maintaining that they should have been added to a feeder system to add strength to the new operations.

The Board amended Western Air Lines certificate for Route 63 to include Oakland, Calif., as a co-terminal with San Francisco, but rejected WAL's application for a San Francisco-Seattle route paralleling United's Route 11.

The majority decision also rejected American Airlines' plea for permission to become the fourth carrier to enter the busy San Francisco-Los Angeles service, but removed existing restrictions from AAL's certificates to permit local service between San Diego and Los Angeles.



Airport Association Tackles Puzzler: Making Fields Pay

Resolution Calls for CAA To
Pay Regular Rental Charges

By LEONARD EISERER

ONE OF aviation's primary economic puzzlers—how to make airports pay—received a lion's share of attention, with little agreement being reached, at the annual convention of the American Association of Airport Executives in Chicago, May 20-22.

The only approach to unanimity among the 100-plus airport executives was on the importance of the basic problem, the need for making municipal airports at least self-sustaining and private fields somewhat profitable. As to the best methods for achieving the goal, there were considerable differences stemming from the variety of airport conditions represented.

One strong attitude among large airport representatives favored higher charges against scheduled airlines for use of municipal landing areas and terminal buildings. There were some in favor of landing fees for non-scheduled planes, while others were sturdily opposed to such levies, as being a nuisance as well as hindrance to the progress of civil aviation. Then there were those who thought that since air operations create the need for airports they should pay their full share of supporting the ground facilities; still others who felt that non-aviation activities in terminal buildings should bear the major pressure of financing airport operations, since flying represented the lodestone for extraneous businesses, such as restaurants and stores, and thus should be given economic encouragement.

However, there was AAAE consensus that the federal government should begin paying at regular commercial rates for space now occupied at terminals on a

nominal dollar-a-year basis. Except for control tower and weather reporting facilities, it was agreed that federal agencies should pay for space occupied at prevailing rental rates or transfer their operations elsewhere. It was particularly felt that the Civil Aeronautics Administration's inspection division should not utilize valuable terminal space at the current nominal fee.

Other AAAE resolutions asked (a) that control tower operation be made a permanent function of the federal government; (b) that the disposal of war surplus airport equipment be expedited, especially for items involving air safety; (c) that Congress direct the Weather Bureau to prepare adequate weather information off federal airways; and (d) that the federal government assume responsibility for rehabilitation of civil airports damaged by Army-Navy use in wartime.

AAAE commended the Army Air Forces for its "broad and far-sighted planning" in development of a strong, well-equipped Air National Guard and AAF Reserve.

New officers elected are Woodruff De Silva, manager of the Los Angeles Municipal Airport, president; Neil Brackstone, manager of Capitol City Airport, Lansing, Mich., 1st vice president; Hervey Law, manager, Washington National Airport, 2nd vice president; Douglas Langstaff, Moisant Airport, New Orleans, 3rd vice president, and Pat Moore, Peoria, Ill., secretary-treasurer.

For their contributions to aviation and airports during 1945, AAAE named four to receive lifetime honorary memberships in the organization: Dr. J. J. Green, Air Transport Board, Ottawa, Canada; Charles Donaldson, assistant administrator, CAA, in charge of airports; Ed Travis, Jr., supervisor of airports for CAA 4th Region; and George Borsari, liaison officer, CAA, in charge of surplus disposal.



Airport Bill Ceremony—In a jovial mood along with Congressional and government aviation leaders who witnessed the event, President Truman selects one from a handful of pens for signing the Federal Airport Bill on May 13. Present at the ceremony, left to right, were Sen. Pat McCarran (D., Nev.), author of the Senate airport bill; Rep. Jennings Randolph (D., W. Va.), a Congressional leader in aviation activities; Gael Sullivan, Second Assistant Postmaster General; Rep. Alfred L. Bulwinkle (D., N. C.), chairman of the aviation subcommittee of the House Interstate and Foreign Commerce Committee; William A. M. Burden, Assistant Secretary of Commerce-Air; T. P. Wright, Administrator of Civil Aeronautics; and Charles B. Donaldson, assistant CAA administrator in charge of airports. In right foreground at desk is L. Welch Pogue, chairman of the Civil Aeronautics Board.

Aviation Calendar

June 1-2—National Air Carnival, Birmingham.

June 1-2—Air Show at Los Angeles Municipal Airport, sponsored by Los Angeles Examiner.

June 2—Tenth annual Aerial Round-up, Weir Cook Airport, Indianapolis, sponsored by American Legion.

June 2-7—SAE Summer Semi-Annual Meeting, French Lick, Ind.

June 4—IATA North Atlantic Traffic Conference, New York.

June 5-7—ALA Airworthiness Requirements Committee meeting with CAA, Hotel Statler, Washington.

June 8-9—Dedication Eldon, Mo., Model Airport.

June 13-14—IAS National Light Aircraft Meeting, Rackham Educational Memorial, Detroit.

June 13-15—Annual New England lightplane tour, auspices New England Aviation Trades Association.

June 14-15—Third National Air Conference sponsored by National Aeronautical Association of Canada, King Edward Hotel, Toronto.

June 25-26—Aviation Distributors & Manufacturers Ass'n meeting, Hotel Traymore, Atlantic City, N. J.

July 18-21—World's Fair of Aviation, Omaha.

July 18-19—IAS National Annual Summer Meeting, Hotel Hollywood-Roosevelt, Los Angeles.

July 19—Organization meeting Flying Farmers of Minnesota, U. of M., St. Paul.

July 19-20—NAA National Convention, Omaha, Neb.

July 26-27—NAA Joint Private Flying Conference, Milwaukee.

July 29-30—NAA Joint Air Youth Training Conference, Milwaukee.

July 30—IATA European-South American route conference, Paris.

Aug. 1-2—National Flying Farmers' Association first annual convention, Oklahoma A & M College, Stillwater, Okla.

Aug. 2-4—Observance of 20th anniversary of air passenger service, Grand Rapids, Mich.

Aug. 21-23—World Congress on Air Age Education sponsored by Air Age Education Research, International House, New York.

Aug. 22-24—SAE National West Coast Transportation & Maintenance Meeting, New Washington Hotel, Seattle.

Aug. 24-25—Denver International Air Show, Denver, Col.

Aug. 30-Sept. 7—International Air Show, de Havilland Airport, Toronto, auspices National Aeronautical Association of Canada, 409 Confederation Life Bldg., Toronto.

Aug. 31-Sept. 2—National Air Races, Cleveland, O. (Official dates)

Sept. 17—IATA Western Traffic Conference, Rio de Janeiro.

Oct. 3-5—SAE National Aeronautics (Fall) Meeting and Aircraft Engineering Display, Biltmore Hotel, Los Angeles.

Oct. 14-17—National Aviation Clinic, Oklahoma City.

Oct. 16-17—SAE National Transportation & Maintenance Meeting, Hotel Knickerbocker, Chicago.

Oct. 23-25—Second Annual Arizona Aviation Conference, Phoenix.

Oct. 29—Annual meeting International Air Transport Association, Cairo.

Nov. 7-8—SAE National Fuels & Lubricants Meeting, Mayo Hotel, Tulsa, Okla.

Dec. 2-4—SAE National Air Transport Engineering Meeting, Edgewater Beach Hotel, Chicago.

Dec. 12-15—International Aviation Celebration, El Paso, Tex., auspices Chamber of Commerce.

Airlines Study Joint Air Freight Plan With Consolidated Tariff

Two major developments in the changing air cargo field late last month were the disclosure that the scheduled airlines are finally coming up with a joint air freight agreement and a TWA proposal for an extensive common carrier air property service linking its system with that of four other companies.

As part of a long-expected program of concerted action by scheduled airlines in air freight, the joint agreement is now before the individual carriers for sanction before being submitted for Civil Aeronautics Board approval. The agreement, which will probably be filed within the next few months, provides for a consolidated tariff printed under one cover. It would expedite handling of cargo shipments along domestic routes through cross-country interline arrangements, in addition to bringing sizeable savings to the carriers through joint publication of rates and elimination of other duplicating traffic expenses.

Actual filing of the consolidated tariff most likely will await approval of the policy-making agreement by the CAB, which, if granted, would relieve the carriers from operations of anti-trust laws.

It is believed that between 10 and 12 carriers will be party to the pact, compared with seven now engaged in freight operations. This number would include probably all of the scheduled airlines now in or planning early entrance into cargo business, except Northwest Airlines. The latter is ruled out by its special agreement with Railway Express Agency which goes into effect today. (AMERICAN AVIATION, May 15).

While the consolidated tariff would not necessarily mean identical freight rates for all the companies, there has been underway for some time a steady trend toward tariff uniformity among the individual carriers. Thus, TWA's revised freight tariff filed last week is along the pattern already adopted by United, American, and Braniff.

Producer-to-consumer service for more than 700 communities is provided in the single-class structure proposed by TWA, offering joint rates with Braniff, Continental, Western Air, and Inland. The tariff, to be effective June 21, is based on airport-to-airport rates approximating 26½¢ per ton mile.

The combination of carriers concurring in the tariff offers to shippers "an east-west north-south nationwide common carrier air freight service which has never been equalled before," according to Robert E. Whitmer, TWA's director of cargo sales.

Explaining the company's shift from its present four-classification rates ranging from 26½¢ to 38½¢ per ton mile, Whitmer pointed out that the "revision to one class is required by competitive circumstances. It does not indicate TWA's disavowal of rate classification. We are convinced that future air freight tariffs will require establishing class rates for different commodities."

TWA also filed a local commodity tariff for fresh fruits and vegetables, which is designed to move large quantities of produce from California areas to eastern



AA's VP-Sales—R. E. S. Deichler, former American Airlines' vice president-administration, became vice president-sales for the company on May 16, replacing Charles A. Rheinstrom, who resigned. Deichler served in the U. S. Army Air Forces as a colonel. His last assignment was chief of management control for AAF. Before the war he was with American Hotels Corp., serving as vice president and manager of the Hotel Huntington (Long Island) and related properties.

markets. Sample rates on perishables, per 100 lbs., are from Los Angeles or San Francisco to Boston, \$20.25, to New York \$19.50, to Chicago, \$16.50. Minimum load at these rates is 5,000 lbs.

Western Air Lines and Inland Air Lines last month each filed individual and joint one-class air freight tariffs, similar to the United-American-Braniff-TWA structures, with an effective date of June 21.

Rheinstrom, Sternberg Resign Unexpectedly

The unexpected resignation of two airline officials, both veterans in the industry, were announced during the past two weeks.

Charles A. Rheinstrom, vice president-sales and director of American Airlines, resigned suddenly on May 16, and Walter Sternberg, Eastern Air Lines' general traffic manager, resigned effective May 15.

Although no official reason was given for his resignation, Rheinstrom denied that he was leaving because of ill health.

C. R. Smith, chairman of the AA board, stated that "Mr. Rheinstrom has had long service with the company and has made many contributions to its development. We very much regret to see him go." Rheinstrom said he will open his own firm of aviation consultants. Temporary address is 521 Fifth Ave., New York.

Rheinstrom began his aviation activity with the Thompson Aeronautical Corp. in Cleveland in 1928. He became traffic manager for American's eastern division at St. Louis in 1933 and had been a vice president since 1937.

Sternberg, well-known in industry circles, had been with Eastern for 15 years, starting in Miami as traffic representative and advancing through the years to Eastern's top traffic position.

No announcement has been made as to Sternberg's successor, and he did not reveal his future plans.

Airlines Cancel Orders For Constitution; Ship To Have Turbine Power

Disclosure that both Pan American World Airways and American Overseas Airlines had given Lockheed Aircraft Corporation conditional contracts for double-decker Constitutions, but later had cancelled them, was made by Robert E. Gross, president of Lockheed in his interim report to stockholders.

Two of the 185,000-pound XR60's, which is the Navy's designation for the experimental Constitution, now are being manufactured behind closed doors at Lockheed's Burbank plant under a \$22,000,000 contract.

One model is rapidly nearing completion and the Pratt and Whitney 28-cylinder Wasp Majors have been delivered for the nacelle installations which are in progress. The four-bladed propellers also have been delivered and the only thing lacking is the landing gear.

Lockheed originally had hoped to have the Constitution in the air late this spring or early in the summer, but the landing gear, along with some other material shortages, caused delays. The great weight of the ship posed problem in the construction of the gear which is being developed by the Menasco Manufacturing Company. The gear now is nearing completion and the ship will be ready to fly later this year.

If the Constitution is developed as a commercial craft it will have jet turbine power plants.

In his report to the stockholders, Gross explained that Lockheed had not counted on the Pan American or American Overseas condition orders as firm orders, but he added that the Constitution could have a great future if the demand for airplane seats justifies the use of super-transport. In view of the fact that production of a commercial Constitution would be two or three years away, it is practically certain that the reciprocating engine would become obsolete as the power plant for bigger transports in that length of time.

It is estimated that the Constitution as a commercial craft would cost in excess of \$3,000,000. Engine installation is one of the larger cost items. It is reported the cost of each nacelle, including the engine, is \$225,000, making a total cost of the four engine nacelles nearly \$1,000,000. Each side of the landing gear is reported to cost \$175,000.

The Constitution is designed to carry from 103 to 160 passengers, depending upon cabin arrangements.

Show Dates Set

Cleveland and Los Angeles have been selected as the sites for the first two annual air shows to be officially sponsored by Aircraft Industries Association. Clyde M. Vanderberg, war-time head of the East Coast Aircraft War Production Council, has been named to head both shows.

The Cleveland show will run from Oct. 4-12 and will be housed in the so-called Fisher plant, a war-built aircraft factory now listed as surplus. Dates for the Los Angeles show have not been set, but it probably will be held in November.

Light Plane Output Moves Up Despite Material Shortages

Piper Leads in Production With Aeronca High in Output

BECAUSE of an early start after V-E day, Piper Aircraft Corp. holds a substantial lead in the production of personal aircraft in 1945 and 1946, although Aeronca showed the highest output in the first four months of 1946, a survey of leading personal plane manufacturers reveals.

Despite shortages of materials at most of the plants, and strikes that closed two

Manufacturer	Model	1945 Output	1st 4 Mo. 1946	Estm. May Prod.	Estm. 1946 Prod.
Aeronca	Champion	445	2,180	790	10,000
Beech	Model 18	81	148	33	780*
Bellanca	Cruisair	1	7	8	780*
Culver	Model V	119	1,259	450	5,000
Ercoupe	GC-16	7	81	137	3,388†
Glebe	GC-12 Swift	1,078	1,881	84	2,900
Piper	J-3 Trainer	810	100	63	2,700
Stinson	PA-12 Crusier	810	100	63	2,700
Taylorcraft	BC-125	810	100	63	2,700
Waco		810	100	63	2,700
Totals		2,318	6,854	2,489	28,318

* UAW-CIO local went on strike May 18.
† Production held up pending CAA certification of Model V.
‡ Total for both models.
§ Plant closed by strike throughout May.
¶ Producing first of new model about November.

factories, Stinson and Bellanca, actual production figures were generally high in the first four months of this year, reaching roughly one-sixth of the total estimated output for the year. Most of the light aircraft companies had not been expected to hit full production schedules until July or August.

The 10 aircraft companies reporting, including Aeronca, Ercoupe, Piper and Taylorcraft, produced a total of 6,854 planes in the first four months, and reached an estimated 2,689 in the month of May. If the rate were maintained for the rest of the year, those companies would slightly exceed their total production estimate for 1946, despite the fact that several of them are not yet in production at all.

Waco is working on an entirely new craft, expected to be completed in the late fall, and does not expect to get into production until next year. The Culver Model V is now undergoing Civil Aeronautics certification tests, and no estimate of the firm's production is yet available.

Production by other companies, notably Cessna, Commonwealth, Fairchild, Grumman, Rocket, Luscombe, North American, and Republic, is just getting under way and their production estimates are not yet available.

The figures indicate that had it been merely a matter of plant reconversion and retooling, the light aircraft companies might have exceeded the CAA's estimate of 40,000 planes this year. They have been hampered thus far, however, by their inability to get parts and accessories from their suppliers. The real pinch of shortages of basic materials, such as aluminum, fabric and steel, is just beginning to take effect as stockpiles near the exhaustion point.

Light aircraft plants thus far have enjoyed a fairly glutted labor market, with the wealth of trained personnel returning from the armed services, and the need for the curtailing of payrolls with the termination of government contracts.

More Constellations

Transcontinental & Western Air announced the purchase of an additional 13 Constellations from Lockheed Aircraft Corp., at a cost of \$10,000,000. The order, with 36 Constellations previously purchased, give TWA 49 of the four-engine aircraft and bring the company's total investment in this equipment to \$40,000,000.



General Counsel—Emory T. Nunneley has been named general counsel of the Civil Aeronautics Board, succeeding George C. Neal, resigned. Nunneley has served as assistant general counsel and has been on the CAB's staff since 1939. Neal's resignation is effective July 1. He will enter private practice.

Pilots' Wage Demands Revealed at Hearing Of Emergency Board

An airline captain flying Constellation equipment on foreign routes would receive a maximum of \$1,657.89 per month, while a DC-4 captain would get \$1,265, according to wage demands made May 27 by the Air Lines Pilots Association at the hearing of the President's Emergency Board in New York.

The Emergency Board was appointed after the recent threatened strike of TWA pilots. This strike has now been indefinitely postponed. ALPA protested strongly the action of President Truman in including all members of the Airlines Negotiating Committee as parties to the wage dispute. ALPA claimed that only TWA was involved in the current dispute, and that it desired to deal with the other airlines one at a time.

The long-awaited wage demands are covered in a formula containing base pay, hourly pay, day and night and mileage pay at different rates for Constellation and DC-4 pilots, and different rates for domestic and foreign flying.

Minimum and maximum earnings for pilots would be: Constellation, domestic, \$1,382.89 and \$1,557.89 per month. Constellation, foreign, \$1,482.89 and \$1,657.89. DC-4 domestic, \$1,090 and \$1,265. DC-4 foreign, \$1,190 and \$1,365.

Co-pilots are asking the following: Constellation foreign, \$701.46 and \$861.46. Constellation domestic, \$651.46 and \$811.46. DC-4 foreign, \$545 and \$705. DC-4 domestic, \$495 and \$655.

Mileage limitations of 22,000 a month on DC-4s and 29,000 on Constellations are asked by ALPA, as well as hourly limitations of 900 per year on DC-4s and 850 on Constellations.

Shloss Heads Aviation Writers Association

Leon Shloss, of *Popular Science* Magazine, New York, was elected president of the Aviation Writers Association at the annual meeting in Indianapolis Saturday, succeeding Maurice Roddy, Chicago *Times*. John Stuart, of the New York *Times*, was elected chairman of the board.

Other officers: Gene Dawson, Indianapolis *News*, 1st vice president; Dick Kirschbaum, Newark *News*, 2nd vice president; Charles McReynolds, McGraw-Hill Publishing Co., Los Angeles, 3rd vice president; Devon Francis, *Popular Science* Magazine, executive secretary; and Leslie Spencer, New York advertising man, treasurer.

The association voted to broaden eligibility rules for membership to permit public relations men and others concerned with aviation to become non-voting members.

Amendment Urged To Aid Airport Building

William L. Anderson, president of the National Association of State Aviation Officials, has called to the attention of the Civil Aeronautics Administration the need for an amendment to the Federal Airport Act which will permit smaller cities to go ahead with airport construction programs now and receive credit later for work done and money expended under the Federal grant provisions of the Act.

Under the terms of the amendment proposed by NASAO, a local sponsor would be permitted to acquire a site that has been approved by CAA, spend its own money for surveys and plans, in accordance with CAA standards, and then spend its money for sufficient construction to make the site usable for light airplanes.

The amendment would permit credit for the money spent by the community, at a fair appraised value, when and if the project is approved for construction later.

ATA Survey Shows Domestic Carriers With Total Fleet of 556 Aircraft

The domestic airlines had a total fleet of 556 aircraft of all types as of April 1, the Air Transport Association reported in a survey. The compilation also showed that the carriers anticipated delivery of an additional 143 aircraft of all types between July and Dec. of this year.

The domestic airlines' total fleet, in-

cluding further anticipated deliveries of the Martin 202, 303 and Consolidated 110 and 240, would reach 1381, according to the ATA survey. This figure also included aircraft overseas in possession or expected by the end of 1947.

American Airlines with 202 aircraft in service and on order showed the largest

total, followed by United Air Lines with 200, and Pennsylvania-Central Airlines with 120. TWA's total figure was 101. All figures are exclusive of equipment used in international services.

The following table provides a summary of aircraft owned and on order by the carriers:

SUMMARY OF AIRCRAFT OWNED AND ON ORDER U. S. DOMESTIC AIR CARRIERS

Airline	Owned as of April 1, 1946	Anticipated Deliveries July-Dec. 1946	Anticipated Deliveries Jan.-June 1947	Further Anticipated Deliveries	Total
All American Aviation	10 Stinson 10-C 1 Norwudyn 2 Beechcraft	N.R.*	N.R.	N.R.	10 Stinson 10-C 1 Norwudyn 2 Beechcraft
American Airlines	13 Douglas DC-3 8 Douglas DC-4 90	14 Douglas DC-3 2 Douglas DC-4	2 Douglas DC-4 23 Consolidated 240 56	N.R.	88 DC-3 20 DC-4 44 DC-6 2 CV-340
Braniff Airways	17 Douglas DC-3 5 Douglas DC-4 22	2 Douglas DC-3	18 Martin 202	N.R.	202 DC-3 5 DC-4 18 M-202
Chicago & Southern Air Lines	14 Douglas DC-3 4 Douglas DC-4 18	N.R.	17 Martin 202	N.R.	14 DC-3 4 DC-4 17 M-202
Colonial Airlines	16 Douglas DC-3	N.R.	20 Martin 202	N.R.	36 DC-3 20 M-202
Continental Air Lines	12 Douglas DC-3 17 Douglas DC-4	8 Douglas DC-3	N.R.	N.R.	17 DC-3 17 DC-4
Delta Air Lines	7 Douglas DC-4 24	N.R.	5 Martin 202 or Consolidated 110	15 Martin 202 or Consolidated 110	20 M-202 or C-110
Eastern Air Lines	54 Douglas DC-3 1 Douglas DC-4 55	19 Douglas DC-4	28 Martin 202 14 Lockheed Constellation 39	25 Martin 202	84 DC-3 20 DC-4 50 M-202 14 L.C.
Esair	3 Lockheed 10-A 3 Douglas DC-3 6	N.R.	N.R.	N.R.	138 L-10-A 3 DC-3
Mid-Continent Airlines	8 Douglas DC-3 5 Douglas DC-4 13 Lockheed 18 17	2 Douglas DC-3 1 Douglas DC-4	6 Douglas DC-6	N.R.	10 DC-3 5 DC-4 6 DC-6 12 L-18
Northeast Airlines	6 Douglas DC-3	9 Douglas DC-3	N.R.	N.R.	24 DC-3 3 DC-4
Northwest Airlines	24 Douglas DC-3 11 Douglas DC-4 35	12	10 Boeing 377	N.R.	18 DC-3 11 DC-4 10 Boeing 377
Pennsylvania-Central Airlines	20 Douglas DC-3 27 Douglas DC-4 56	N.R.	14 Douglas DC-6 20 Martin 202 64	N.R.	48 DC-3 27 DC-4 14 DC-6 20 M-202
Transcontinental & Western Air	50 Douglas DC-3 5 Boeing 307 5 Lockheed 49 64	13 Douglas DC-3 1 Lockheed 49 9 (unspecified)	3 Douglas DC-3 10 Lockheed 49 1 (unspecified)	N.R.	120 DC-3 5 B-307 20 L-49 20 L-unspecified
United Air Lines	70 Douglas DC-3 28 Douglas DC-4 98	12 Douglas DC-6	23 Douglas DC-6	70 Martin 202	200 DC-3 28 DC-4 23 DC-6 70 M-202
Western Air Lines	16 Douglas DC-3 3 Douglas DC-4	10 Douglas DC-4	5 Douglas DC-6	10 Consolidated 240	300 DC-3 16 DC-4 5 DC-6 10 Const. 240
TOTAL	556	143	276	120	1,088

Overseas in possession or expected by end of 1947
DC-3 (2); DC-4 (64); DC-3 (72); Sikorsky (5); B-307 (3);
* N.R.—No report

L-49 (75); B-314 (8); M-130 (1)
B-377 (28); Rainbow (10); CV-47 (15); DC-6 (3) .. Total 386.

Seats Available
1,088 28,460
1,381 80,882

Modified TWA-Italian Deal Backed by U. S.

The State Department said May 13 that if the "exclusive" features are eliminated, it is prepared to urge the Italian government to implement its contract with TWA for operation of Italian air routes. TWA and the Italian government had formed a joint company, Linee Aeree Italiane, in which TWA held a 40% interest. The company was to have exclusive operating rights over Italian internal routes.

Following the State Department announcement, TWA quickly withdrew the exclusive feature.

In effect, the State Department thus refused to accede to a British demand that British Overseas Airways Corporation be allowed equal participation in LAL.

By eliminating the exclusive features of the contract, the British and Italians could start their own competing service if they so desired.

In a note to the British Ambassador, the State Department said that "it is this government's view that the opportunity for participation in the internal civil aviation of ex-enemy states should not be restricted to any one state or any combination thereof to the exclusion of others. However, the United States government does not consider that such participation necessitates the joining of foreign interests in a single enterprise."

Acting Secretary of State Dean Acheson informed TWA President Jack Frye that unless the exclusive feature was eliminated, the Department "cannot intercede on behalf of your company with the Italian government . . ."

Round the World

Peter Masefield, British civil air attache in Washington, recently completed a round the world trip by air, utilizing a ferry trip in a DC-4 on Australian National Airways from San Francisco to Australia, and regular air services on other segments. His record:

130 hours and 43 minutes actual flying time for 26,759 miles. Average block-to-block flying speed—204 miles per hour. If entire trip had been made at actual or proposed fares, the cost would have been \$2,482, or 9.3c per mile. Masefield considered the average speed to be satisfactorily high but believes the present international air fares are too high. He averaged 1000 miles a day on his 27,000-mile trip.

National Affairs and Congress

Landis Confirmed by Senate

The Senate confirmed the appointment of James M. Landis, dean of the Harvard College Law School, to be a member of the CAB for the remainder of the term expiring Dec. 31, 1947. Landis has accepted chairmanship of a special cartels and monopoly committee of the Twentieth Century Fund to supervise an investigation of cartels in international trade and monopoly in domestic business.

Aircraft Disposal Report

The Office of Foreign Liquidation Commissioner reported that as of Mar. 31, surplus aircraft representing an original cost of \$87,700,000 had been disposed of for \$14,800,000 in foreign areas. The report to Congress emphasized that of long-range importance to the U. S. is the fact that virtually every country in the world served by air transportation is using U. S.-manufactured equipment.

ATC Halts 'Globester' Flights

The Air Transport Command has withdrawn plans to close its South Atlantic route, and will keep it open on an operational status. Bases will remain at Ascension Island, Monrovia and Dakar. ATC has discontinued its weekly "Globester" world-encircling trips, and has withdrawn personnel and facilities east of Calcutta to Manila, except China stations.

AAF Establishes Institute

Maj. Gen. Curtis E. LeMay, Army Air Forces research and development chief, announced establishment of an AAF Institute of Technology to prepare air officers for the atomic warfare of the future. The new school, to be located at Wright Field, will graduate 350 officers annually. It will furnish the AAF a corps of highly trained regular and reserve officers.

Mail Bill Passes House

The House on May 16 passed H.R. 5560, a bill providing for the reduction of first class air mail postage rates from eight to five cents an ounce. The bill was sent to the Senate, where early action was anticipated. The measure was approved unanimously in the House.

Industrial Flying Committee Formed

Formation of a Provisional Committee for Industrial Flying to prepare a program aimed at placing industrial flying on the same operational level with airline and contract services was completed recently in New York. Sydney Nesbitt, president and general manager of Atlantic Aviation Corp., heads the movement.

Would Increase Plane Fleet

Leslie A. Bryan, newly appointed director of the Institute of Aeronautics, University of Illinois, has recommended to the University's Aeronautics Advisory Board, that the institution's fleet of 10 light planes for student training activities be increased to 25 and that a vigorous effort be made to have the school's airport included as a point on several scheduled airline routes.

B-29s Break Records

AAF B-29s stationed on Guam have broken world's records previously held by the Soviet Union and Germany by lifting heavier payloads to new heights. The official record showed the following results of the "Marathon" project:

On May 15, Maj. Finlay F. Ross, Jr., Wichita, lifted a 2200 pound load to 45,000 feet altitude, surpassing a former Soviet mark by 5000 feet. The previous day, Lt. John P. Robinson, Fall River, Wis., flew an 11,000 pound load to 42,780 feet, smashing a previous U. S. Army record of 24,205 feet. Records made earlier in the record tries included new marks for 4400, 22,000 and 33,000 pound payloads. The latter was carried to a height of approximately 6200 feet.

Hershey Consultant to AAF

C. Scott Hershey, who resigned recently as managing editor of *Aviation News*, has accepted temporary appointment as an expert consultant for the Army Air Forces. His plans for the future have not been completed beyond the term of his Air Force appointment.

Military Receives 148 Aircraft

The Army and Navy together received 148 aircraft in April, bringing the 1946 military deliveries to 673, excluding experimental types. Army acceptances totaled 101 compared with 122 in March, while Navy's dropped to 47 from 65 the previous month. Included in the April deliveries were 19 bombers, 69 fighters, 10 transports, and 50 special purpose Culver planes.

Naval Research Office Proposed

The House on May 20 passed a bill, H.R. 5911, providing for the establishment of an Office of Naval Research in the Navy. It will be the duty of the Office of Naval Research to plan, foster, and encourage scientific research in recognition of its paramount importance as related to the maintenance of future naval power.

Hearings May Be Postponed

Although June 17 has been set as the new date for hearings on the revised McCarran All American Flag Line bill, S. 326, there were good reasons to believe that the Senate Commerce committee might not be able to follow through on the schedule because of the proximity of the summer adjournment of Congress, tentatively set for mid-July. The hearings were postponed from May 20 because of the inability of a large number of Senators to be present.

Wright Receives Award

Civil Aeronautics Administrator T. P. Wright has been awarded the Medal of Freedom by the War Department for his work as one of the directors of the Strategic Bombing Survey.

More CAA Funds Recommended

The Budget Bureau has recommended supplemental estimates amounting to \$710,000 for the Civil Aeronautics Administration. Of this amount, \$150,000 is recommended for use in employment of technical personnel incidental to CAA's participation in the work of the Provisional International Civil Aviation Organization. The remaining \$560,000 is recommended for the construction of 56 apartment units to house CAA air-navigation personnel in Balboa, Canal Zone. CAA will make appropriate deductions from salaries of personnel occupying these quarters, the Budget Bureau stated.

Casey Heads ATA Committee

Joseph E. Casey, former member of Congress from Massachusetts and general counsel for TWA, has been named executive director of the International Committee of the Air Transport Association. The committee held its first meeting May 15 to make preliminary plans for the study of immediate problems relating to overseas air transportation upon which it will base its policy recommendations to the Board of Directors of ATA.



First U. S. Jet Bomber—Pictured is the Douglas XB-43, first U. S. jet propelled bomber and flown at Muroc Army Airfield, Calif. The XB-43 is powered with two T. 58. 100 jet engines, supplying 6000 pounds of static thrust. It is expected to attain a speed of 500 mph. Pressurized cabin provides maximum comfort at its service ceiling of over 38,000 feet. Service range is 1400 miles. Wing span is 71 feet, two inches, and plane measures 51½ feet from nose to tail.



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WICHITA, KANSAS, U. S. A.

Foreign Air News

By Frank Holz

Control Caribbean-Atlantic—Control of Caribbean-Atlantic Airlines has been bought from former president Dennis Powelson and his associates by the Trigo brothers, prominent Puerto Rican business men. Dionisio Trigo is now president of the airline and Benigno Trigo is vice president. They hold about 75% of the stock.

During April, the Puerto Rican airline carried over 3000 passengers operating one Lockheed Lodestar. It has since bought a DC-3 from PCA and expects to acquire another about June 1. Ownership of the Lodestar is reported to be in dispute between Caribbean-Atlantic and National Airlines.

IATA Sets Meetings—The Executive Committee of International Air Transport Association recently held its first meeting since Wm. P. Hildred assumed the post of Director-General. Three airlines were admitted to active membership: Compagnie Generale de Transports, Beirut, Lebanon; Divisao de Exploracao dos Transportes Aereos (DETA), Mozambique; Ethiopian Air Lines, Addis Ababa. Several meetings were scheduled, including a European-South American route conference for Paris, July 30, and a Western traffic conference for Rio de Janeiro, Sept. 17. Lawrence C. Tombs

was elected Secretary and H. J. Gorecki was made Treasurer of IATA, subject to confirmation at the annual meeting in Cairo on Oct. 19.

Criticizes Air Invasion—C. G. White, vice chairman of Tasman Empire Airways, criticized an Australian National Airways offer to operate daily Australia-New Zealand services with DC-4's as an "invasion" of his company's territory. He pointed out that use of British aircraft was required by his airline's license to operate. Tasman Empire Airways plans to place into service three 30-passenger Sunderland Mark V flying boats, reducing flying time to 7½ hrs. and increasing seat capacity to 270 each way weekly as compared with the present 57.

● Scottish aviation has won partial autonomy within the United Kingdom. The projected government-owned British European Airways is to have a separate Division to manage commercial services based in Scotland. All Highland airports, including Prestwick, will be administered by a local board, according to the British Ministry of Civil Aviation.

● A. V. Roe Canada Ltd., the Dominion branch of the British Hawker-Siddeley aircraft group, will design and develop gas turbine aircraft engines on contract for the Canadian Government. The company will take over the work and most of the personnel of Turbo Research Ltd., a Crown agency. A. V. Roe Canada has leased the government-owned plant at Malton, Ontario.

● Butler Air Transport Pty. Ltd. has been organized in Australia to take over the Butler Air Transport Co. which operated for over 12 years. Capitalization of the new firm is reported as about \$645,000. Managing director is C. A. Butler, who held the same post in the previous company.

● Aerovias Braniff has asked the Cuban Government for an extension of its permit to begin scheduled services between Cuba and Mexico.

● The International Commission on Air Navigation (CINA), an intergovernmental agency, met in Paris this past month and suspended its own technical annexes in favor of the new PICAQ rules and standards.

● The Chinese Government will manufacture Rolls Royce aircraft gas turbines in China, with British supervising plant construction and initial operations. Chinese technicians are now being instructed at the main Rolls Royce plant in Derby, England.

● Sergio Osmena, President of the Philippine Commonwealth, has approved international route applications of Pacific Airlines and Far East Air Transport, Inc. Pacific Airlines is reported to be a subsidiary of Philippine Airlines, in which TWA holds a 28% stock interest.

● Aer Rianta Teoranta, an Eire Government corporation, has ordered three Lockheed Constellations for transatlantic operations. Aer Rianta holds a 60% interest in Aer Lingus T.T.A., the joint Anglo-Eire airline organized for services to Great Britain and the Continent. Delivery of the Constellations is not expected until 1947.

● A. B. Hans Osterman, a new Swedish operator, will set up Europe's first commercial air pickup service with equipment bought from All American Aviation, Inc. The Swedish Post Office has authorized Osterman to pick up and deliver mail in the Stockholm area.

● Announcements attributed to Soviet sources state that air services from Moscow to London, Paris and Rome will be started soon. Service is to be started by early June between Moscow and Tirana, Albania, with stops at Lvov and Belgrade, it is also reported.

● Aero O/Y, the Finnish airline, is to be re-organized with the government acquiring 66% of the total shares, according to information from Helsinki.

U. S. Asks Delay in New Air Agreement as PICAQ Convenes

The United States has taken the stand that a multilateral civil aviation agreement, containing commercial air rights, should not be adopted by the Interim Assembly of the Provisional International Civil Aviation Organization, which opened sessions in Montreal on May 21.

This is the first meeting of the Assembly, which is composed of a representative from each of PICAQ's 45 member states. The Interim Council, which has only 20 of its 21 seats filled, has been meeting since last August, and the Assembly is considering material prepared by the Council.

High on the agenda was a multilateral agreement, containing provisions upon which the nations were unable to agree at the Chicago International Civil Aviation Conference of 1944. These provisions include the five freedoms of the air.

At one of the early sessions in Montreal, however, William A. M. Burden, chairman of the U. S. delegation, opposed adoption of a multilateral agreement at this time. He made it clear that the U. S. did not believe that bilateral agreements represented the ideal way of doing things, and still favored a multilateral agreement. Such an agreement, however, can be attained only by an evolutionary process "which realistically takes into account national points of view and, in addition, makes full use of the knowledge gained by experience."

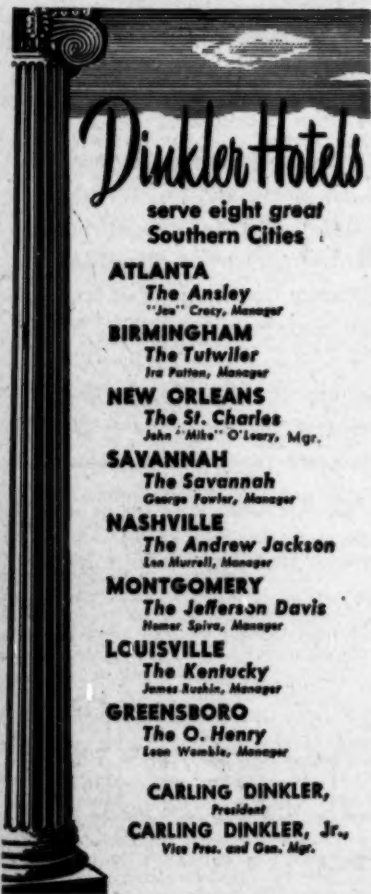
The Assembly's air transport commission should "proceed immediately with a frank and open discussion of all of the problems involved in developing a multilateral agreement so that the national points of view may be made known with respect to all matters which may be the subject of such an agreement," he added.

Burden pointed out that the U. S. had proposed the Air Transport Agreement (five freedoms) at Chicago, but that after only a few nations accepted it, the U. S. turned to bilateral agreements. "We will not again urge adoption of a multilateral agreement on the basis of a hope that it will receive universal acceptance but only after experience can demonstrate a reasonable possibility of acceptance by all..." he stated.

A subcommittee voted 9 to 7 not to fill the Interim Council's 21st seat. This seat had been left open for Russia and the U. S. was said to favor filling it at this meeting. Another subcommittee voted 14 to 1 to name a permanent site for PICAQ.

TACA-Pan Am Clash

In a re-opened proceeding before the Civil Aeronautics Board last month, Líneas Aereas TACA de Colombia S. A. offered to prove that Aerovias Nacionales de Colombia S. A. (Avianca), a Pan American Airways affiliate, was defunct as a corporation and should not be granted a foreign air carrier permit to fly a Bogota-New York route. Avianca denied the allegation, and stated that its fitness, willingness and ability had been proved in an earlier proceeding. The CAB examiner rejected TACA's offer of proof, ruling that it raised issues which could not properly be considered in a reopened hearing.



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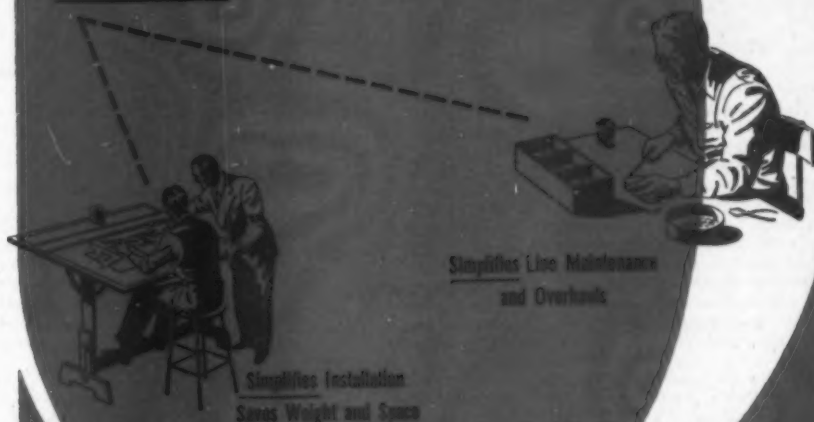
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Pacific Overseas Airlines To Haul Over-Ocean Cargo

Former Consairway Group Is Also Flying ATC Contract

A RARE STROKE of good fortune, plus the ability of a group of ambitious, young flyers to teach themselves how to fly a desk, gives promise of building Pacific Overseas Airlines into one of the nation's larger contract carriers.

Actually, this company, which was organized out of thin air and a lot of enthusiasm only last December, is an employee-owned cooperative organization with a single cargo plane—a converted C-54A—but at the same time it also is the biggest uncertificated operator in the country flying 18 C-54D's more than 26,000 miles per day for the Air Transport Command on daily schedules to Honolulu and Tokyo.

Pacific Overseas Airlines started out as a fledgling flight outfit of some 30 personnel, formed by a group of former Consairway flight officers and maintenance men who found themselves without jobs when the war-time trans-Pacific subsidiary of the Consolidated Vultee Aircraft Corporation suspended operations on January 1. They thought they might work up a modest non-scheduled cargo business in the Pacific and at the time little dreamed that within a matter of two weeks they would skyrocket into a company with 500 employees.

Capitalization already has begun to pose a problem. The monthly payroll alone has grown to exceed the total capitalization of \$100,000. The \$100,000 in stock was issued to the men who do the work and they bought it out of their savings. No one owns more than \$5,000. The minimum is \$500. Nine men have maximum holdings, 31 others hold the remainder of the stock in varying amounts.

Papers, filed between final trips as Consairway concluded operations in December, originally incorporated the company as Industrial Air Transport. This legal requirement fulfilled, D. R. Kindred, vice president-traffic, started out to look for a suitable base of operations. He found it in Ontario, Calif., about 30 miles east of Los Angeles, where the city has taken over the Army Air Base, constructed during the war.

The company's first business consisted of converting a C-54A acquired from surplus. Since it had come into possession of a complete overhaul depot it was able to use its own mechanics and save money on the conversion job.

While the C-54A was still in process of conversion, the group at Ontario heard a rumor that United Air Lines had rejected a request from the Air Transport Command to establish an expanded trans-Pacific service. It developed that United had not rejected the ATC request, but it had demurred at taking over the whole



Lee Dorney (left), executive vice president of Pacific Overseas Airlines, bids Capt. Carl Seill, POA vice president-Pacific operations, bona voyage on the company's maiden commercial scheduled to Shanghai. Copilot Jack Quirk stands beside Dorney.

task on so extensive a scale because of the lack of manpower.

The solution worked out was a three-way deal. United Air Lines became the prime contractor and also agreed to operate part of the service. Pacific Overseas Airlines and Orvis Nelson, a United pilot on leave, became sub-contractors under United.

It is significant, however, that under its sub-contract, Pacific Overseas Airlines took on the longest flight mileage of the three. Flying 18 planes, Pacific Overseas flies two round trips to Honolulu and one round trip to Tokyo each day, plus one extra round trip to Tokyo each week. United flies 12 planes on its route to Tokyo. Nelson, flying 11 planes, shuttles between the mainland and Honolulu.

Within a week after signing the ATC contract the payroll had jumped from 30 to 300 and the second week saw it touching the 500 mark.

PAO is seizing the opportunity offered by the ATC contract to set up its commercial operations on a firm foundation. Unlike most new companies, it doesn't have to carry itself pending the development of its business. It's making money from the start because its ATC contract is on a mileage basis, essentially cost plus fixed fee.

It has started its commercial business with an UNRRA contract, flying between California and Shanghai. Since it has only the one C-54A available for this job, it makes two shuttle trips to Honolulu to accumulate the load it can fly from Hawaii on to Shanghai. On the return trip it is obligated to carry any passengers UNRRA chooses to assign to the flight, but any additional space is available for contract cargo. This space is already booked.

—FRED HUNTER

CAB Investigates Viking Accident Near Richmond

The Civil Aeronautics Board was holding hearings on this issue went to press to determine the cause of the Viking Air Transport accident near Richmond, Va. on May 16, resulting in the deaths of 27 persons.

This was the first major accident involving one of the new non-scheduled uncertificated carriers.

Headquarters of Viking Air Transport are at Glendale, Calif.

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Dal-Air Attains Load Factor Of 50%; Will Expand Further

Texas Carrier Operates Three Daily Intrastate Schedules

WITH LOAD factors increased from 20 to better than 50 percent (the break even point) following the addition of a daily schedule from Dallas to Beaumont-Port Arthur via Tyler, Jacksonville and Lufkin, Dal-Air Lines has undertaken further expansion with the inauguration of service into San Antonio on its route from Texarkana to Austin via Longview, Tyler and Palestine. A third daily schedule—the one with which service was started last Feb. 15—is operated daily between Dallas and Beaumont-Port Arthur via Tyler, Jacksonville, Lufkin and Houston.

Dal-Air, Inc., operator of the new feeder, was chartered originally in Dec. 1944 as an aircraft sales company by Wilson and Norman Germany, sons of a Texas oil man, with the former as president and the latter as vice president. All aircraft sales plans were dropped, however, before operations got underway, and instead Dal-Air Lines was organized to provide needed local service into East Texas points with five 7-passenger converted Norduyn Norseman aircraft.

While classified as a feeder, Dal-Air's principal business is providing local service. For example, its Texarkana-Austin schedule is set up to arrive at Austin at 9:40 a.m. and leave at 3 p.m. so that oil men from East Texas can fly in time for hearings before the State Railway Commission, oil control body, which start at 10 a.m., and return the same day. Likewise, one of the Beaumont schedules leaves Dallas at 7 a.m. arriving at Houston at 10 and returning from Houston at 3 p.m., permitting a full day's business in the Texas industrial capital.

How well this has paid off is shown by the fact that load factors have increased from 10 percent for February-March to better than 50 percent for April-May with an overall average of 40 percent for the first 10 weeks of operation (350,000 seat miles and 150,000 revenue seat miles). At the same time fares have been reduced

progressively from 8c first to 7c and more recently to 6c a mile with a 10 percent reduction for round trip. On the Dallas-Beaumont run, according to Wilson Germany, this actually puts the round trip rate under Delta and Braniff.

Unlike many of the recently organized local carriers, Dal-Air is neither a "money airline" nor a "pilots' airline." The corporation is capitalized for but \$1,000, and capital expenditures to date are under \$100,000. Neither of the Germany's is a commercial pilot, both confining their duties to the administrative end. Seven pilots, all with commercial instrument ratings, are employed, and the chief pilot, who does not fly regular schedules, serves as operations and maintenance manager.

Through May 1, Dal-Air contracted all its conversion and maintenance work to Southwest Airmotive Corp. and Mustang Aviation, Inc. in Dallas. Recently, however, it set up its own shop in Tyler with a mechanic and helper for line maintenance, although it still plans to contract all major overhaul work. Tyler, incidentally, is the operating headquarters for Dal-Air, while Dallas is the administrative headquarters. All schedules are routed through Tyler, and all aircraft are fueled there to permit the purchase of fuel in large quantities (25-30,000 gallons per month) with resultant discounts.

Dal-Air also maintains its reservations control system at Tyler under the direction of Ken Dixon, newly appointed traffic manager. Under this system all stations wire in reservations immediately to the central office by Western Union using a serial rate, and receive confirmation by return wire, the whole process taking only 5-10 minutes. Passenger service information and flight plans are handled the same way.

Ticket sales procedure varies with the different stations. At Dallas, due to lack of space in the terminal building, a co-operative feeder desk handles all lines. At two stations reservations are handled by local hotels, at four others Dal-Air has its own personnel, and at the remainder the airport operator acts as

Carr Elected President of IAT; Other Officers Named

Brig. Gen. Lawrence J. Carr, who since the war has served as chairman of



Gen. Carr

the board of Trans-Caribbean Air Cargo Lines, has been elected president of the Institute of Air Transportation. IAT is the recently-formed organization of non-scheduled contract and charter non-scheduled operators, now having a membership of 20 carriers and several allied industries. Other officers are Sigfried O. Samuelsson, executive vice president; Gilbert Smith, Trans-Marine Airlines, secretary, and Harvey Stevenson, Veterans Airlines, treasurer.

agent. Dal-Air further reports that major airlines' reservations personnel have proved very cooperative.

To date Dal-Air has completed better than 95 percent of its schedules. Flights are limited to daytime but are flown under both instrument and contact conditions. Three aircraft are kept in service regularly with the other two maintained as standbys, and average utilization is about 4 hours a day, although Dal-Air expects to increase this with route extensions. Operating cost, both direct and indirect, is figured at 21c total per aircraft mile.

These were other developments among non-scheduled and intrastate carriers:

Winged Cargo, Inc., based at Philadelphia's Northeast airport, is providing glider freight service to Cuba and Puerto Rico. Present equipment includes three C-47s and five CG-4A gliders. Company officials include Col. Fred P. Dollenburg, President; Capt. Raymond Baldwin, vice president; and Capt. Carl W. Herdic, secretary-treasurer.

Global Airways and Gallagher Bros., are providing charter service from Philadelphia's Southwest airport. Cessna and DC-3 flights to Maine will be featured this summer. Global officials are Joseph Bolnick, president, and Ralph Bolnick, traffic manager.

Otto Airlines of Newark has changed its name to Atlantic Central Airlines. The company will continue its service between Newark and Atlantic City, with the service being expanded to include Camden as soon as Central Airport there has been converted for commercial use.

Air Cargo Transport Corp., based at New York, contracted with Swift & Co., to haul duck eggs to the packer's Fontana, Calif., plant for incubation. The carrier recently made an emergency shipment of gasoline-driven generators from New York to Chicago to alleviate a power shortage aggravated by the coal strike.

Air Pickup Lines, Inc., will inaugurate passenger service on a non-scheduled basis between Los Angeles and Reno June 15 with Cessna equipment. Flights will provide intermediate service to Bishop, Calif., and Carson City, Nev. Charles A. Cooper, Jr., formerly with Eastern Air Lines, is company president.

Willis Air Service, Inc., has inaugurated passenger-freight service from New York to San Juan, P. R. The company shortly will inaugurate service to Colombia and Brazil.

Great Circle Airways, Inc., based at New Orleans, was scheduled to begin air cargo contract operations June 1. The veteran organization will start with six surplus C-47s. R. C. Mahaly is president, and other officers include James B. Leverett, vice president-operations; Louis L. Abadie, second vice president, and Joseph E. Beh, secretary-treasurer.



Norduyn Norseman Equipment of Dal-Air

Rising Costs May Halt Trend Toward Lower Airline Fares

Dwerlkotte Sees Leveling Off At 4½ Cents on Big Aircraft

RISING COSTS are causing airlines to revise their thinking with regard to the possibility of generally lowering fares in the near future, according to Leo H. Dwerlkotte, executive vice president of Western Air Lines.

Seven or eight months ago, airline managements estimated that broader air travel markets might be generated with a rate structure of approximately 3½ cents per passenger mile and that tariffs based on this figure would be feasible because of the economies that would accrue from the use of the improved equipment the airlines are putting into service as it becomes available.

Mounting costs have become so serious, however, that it is now feared rates may have to be leveled off on a basis which will approximate the current 4½ cent structure of tariffs, according to Dwerlkotte.

Extra fares for de luxe equipment, such as the \$25 TWA charges for the Constellation, present no answer to the problem of making revenues balance costs, in Dwerlkotte's opinion.

"All of the new equipment is comparable in performance and it would be impractical to charge so-called extra fares under such circumstances," said Dwerl-

kotte. "It is more logical to base the fare structure on the rates charged for the top-flight equipment, like the Douglas DC-6 and the Constellation, and then possibly adjust fares downward for the equipment used on the local or inter-city flights, like the Consolidated 240's and the Martins."

Current airline costs are abnormally high because of the great expense involved in preparing facilities for the use of new equipment, but increases in wages and material costs also are playing their part in the sharp upward trend of airline expenses and these will continue.

The consolidation of ramp facilities at airports is foreseen by Dwerlkotte as an economy measure. Studies toward this end now are being made by the Air Transport Association and the Civil Aeronautics Board. These studies include investigation of the possibilities of organizing a nation-wide group to install and operate the ramp facilities at all airports as compared to local organization at each airport. Fueling of planes as well as the handling of cargo, mail and baggage might be handled by the consolidated crews.

Dwerlkotte said he felt consolidated ticket offices would be impractical because of their competitive nature, although they might be worked out at certain points where the various airlines are not too directly competitive.

Reservations is another high-cost prob-

No Action on No-Shows

The perplexing problem of "no shows"—people who make reservations and fail to show up for flights—was discussed at the Air Transport Association's Air Traffic Conference meeting in Chicago last month, but no action was taken towards penalizing these offenders. One proposal discussed was the possibility of allowing people who had purchased tickets and then failed to show to collect only 75% of the fare when these tickets were presented for refund. No action was taken, however, because some airline officials pointed out that airline telephone switchboards are now so jammed that it is often impossible for a traveler to contact the company to cancel his space. It was also felt that the big increase in available seats will tend to minimize the no-show problem.

lem because the complexity of clearing space, especially under conditions of high load factors, involves the need of excessive personnel. Dwerlkotte believes the airlines will have to turn to mechanical means to lick the problem.

ATC To Push Air Mail With New Committee

The Air Traffic Conference of the Air Transport Association elected a new vice president and appointed committees to deal with air mail matters and ground transportation problems at its recent meeting in Chicago.

Laigh C. Parker, vice president-traffic of Delta Air Lines, was elected a vice president, succeeding Thomas Wolfe, who resigned recently as vice president-traffic of Western Air Lines.

The air mail committee will consider mail traffic matters and will prepare a promotional campaign to be launched when the 5c air mail bill has passed both the House and the Senate. Serving on the committee are John Hart, United Air Lines; Harry Stringer, All American Aviation; F. A. Miller, American Airlines; Paul Pate, Delta Air Lines, and Robert Whitmer, TWA.

The ground transportation committee will look into problems surrounding airport limousine service throughout the U. S. It may also prepare a questionnaire, to be submitted to passengers in flight, asking what they want in ground transportation. Committee members are Prescott Tolman, Eastern Air Lines; Robert Wilson, Northwest Airlines; Rodney King, American; Dale Lobesinger, United, and William Urquhart, PCA.

Bounds to Leave C&S

George E. Bounds, director of advertising and publicity for Chicago & Southern Air Lines, has announced that he is resigning effective Oct. 1, 1946. Bounds has been with C & S almost 10 years. He did not announce future plans.

Essair Changes Name

Robert J. Smith, recently elected president of Essair, Inc., announced that the company has changed its name to Pioneer Air Lines, Inc. The change has been approved by the secretary of state of Texas.



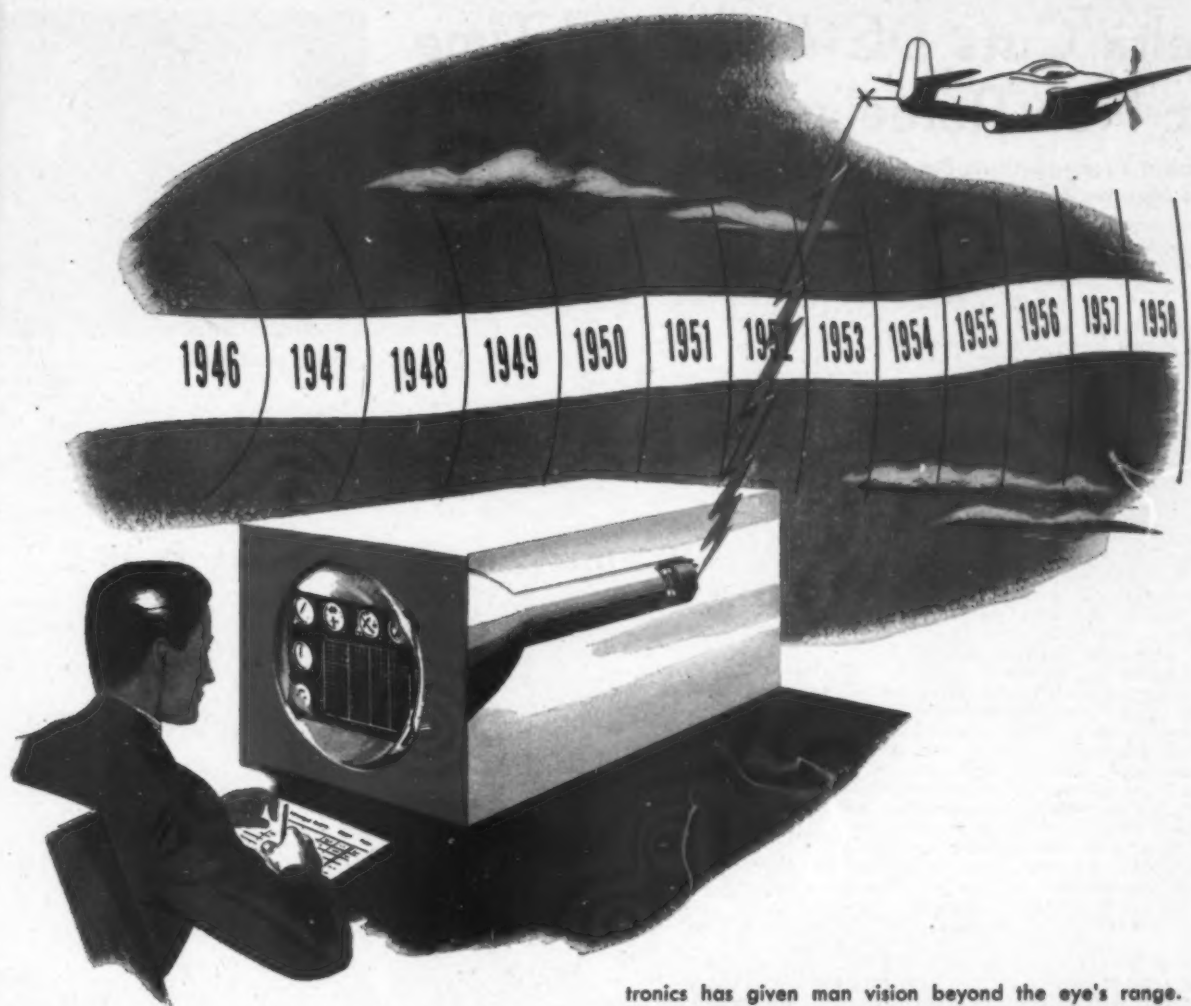
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tronics has given man vision beyond the eye's range. Through the new science of television, Curtiss-Wright's Airplane Division has made it possible to relay instantaneously half a hundred stress and instrument readings to a ground station... a truly remarkable achievement that marks another milestone in aviation's progress.

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Delta Cuts DC-4 Ground Time At Non-Refueling Stations

Cabin Arrangements Permit 15 Minutes for Handling

AFTER TWO months of operating DC-4 equipment, Delta Air Lines is convinced that 15 minutes is sufficient ground time for non-refueling intermediate stations. The company expressed belief that the 44-passenger version of the DC-4 which it uses is responsible for the shorter ground handling period.

Seat arrangement of the cabins, position of the buffets, a new type nose door unloading chute, and accessibility of nose cargo compartments are among the factors which are speeding ground handling of the larger equipment.

Delta's DC-4s are refueled only at terminals and in Atlanta. This is another factor in reducing ground time. Another is the assignment of a minimum of four men to handle the four-engine equipment at intermediate stops, although a five-man crew is preferred.

John L. Schneider, Delta's superintendent of stations, said that location of the buffet in the rear of the DC-4 cabin, between the last seats on the right and the ladies' lounge, permitted caterers to service the aircraft without conflict with cleaners, passengers loading and unloading and other servicing functions.

The Delta aircraft can be catered while passengers are loading and unloading because all seats are forward of the buffet. Passengers enter and deplane through a single double-size door, which will permit passage two abreast. A bulkhead behind the last seats blocks a passenger's view of the buffet during unloading after a flight.

One of the principal factors in Delta's speedy DC-4 handling is the 44-seat arrangement of the cabin. When many other airlines decided to install from 50 to 60 seats, Delta designed a 44-seat version. Several airlines have recently reduced the number of seats in Skymaster cabins after operating with larger totals.

Delta pursers have contributed to the 15-minute intermediate stop record by checking passengers at the foot of the passenger loading steps, supervising cargo loading and locating cargo in forward bins where the baggage is accessible at intermediate stations without having to remove "through" cargo to reach the "off" bags and packages.

At Dallas, an intermediate station, Delta ground handlers recently worked an average of 28 on passengers and 48 pieces of cargo in an average time of 14.6 minutes for each flight. In Jackson, Miss it handled DC-4 flights with an average of 18 on passengers and 48 pieces of cargo in 15.5 minutes. During some stops, ground crews have completed their duties in 8 minutes. Due to refueling, Delta scheduled 30-minute stops on all DC-4 flights in Atlanta and after more than two months operations through Atlanta the 30-minute average has been maintained including refueling. On one flight in April, a DC-4 flight with a near-capacity passenger and baggage load, was serviced in 18 minutes.

Delta now has a total of seven DC-4s in its fleet, the last having been delivered from Douglas Aircraft Co., May 14.

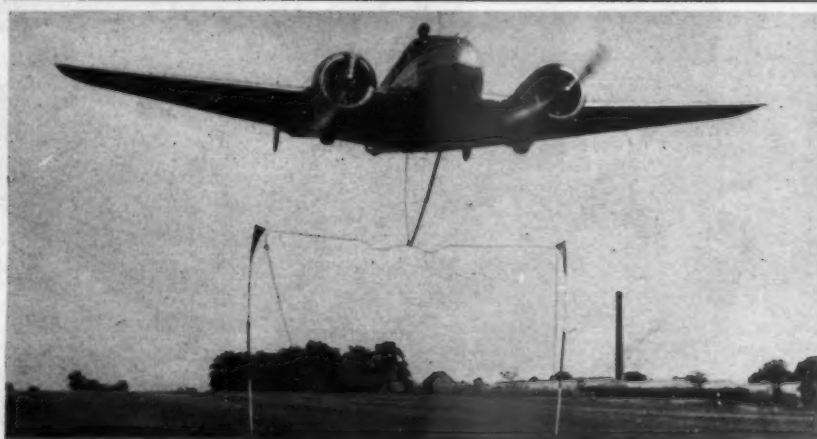
Teen Agers Favor Air

A survey of typical high school youngsters, conducted for United Air Lines by Gil-Bert Teen Age Research, discloses that a vast majority of teen agers intend to travel by air in the future. The survey shows that 80% of students of high school age intend to travel by air; only 12% have no intention of using air travel; and 15% have already flown in commercial airliners. Asked why they would choose air travel, 62½% gave the speed factor; 2½% gave economy; 17½% said "excitement" and 3½% said they would make flying a career.

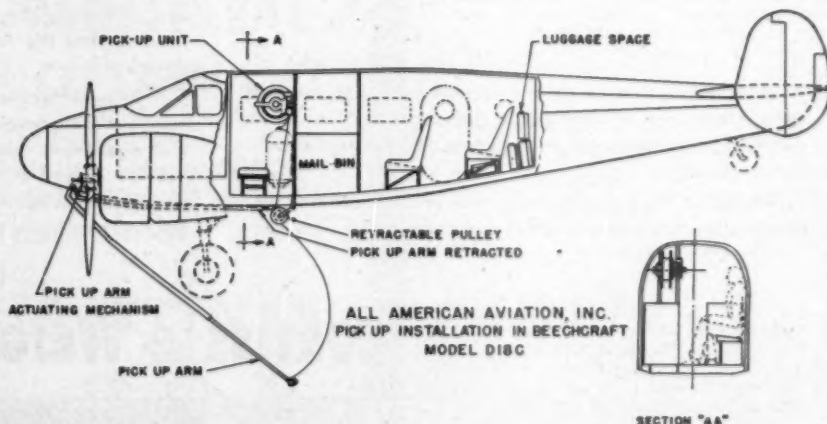


Frye Honored—Jack Frye (left), president of TWA, recently received the Order of Grand Officer of the Crown of Italy from Ambassador Alberto Tarchiani. The award, highest of the Italian government, was given to nine TWA executives in recognition of the carrier's service between the U. S. and Italy and for assistance given for the restoration of air service within the country.

All American Tests Beechcraft 18-C



ALL AMERICAN AVIATION, air pick-up operator, has taken delivery on the first of the new Beechcraft Model 18-C, which the company intends to use for combination passenger-pick-up service. The aircraft pictured here is equipped for air pick-up and will carry four passengers in addition to crew. By removing the pick-up equipment, which is quickly dismountable, the aircraft's passenger capacity can be increased to eight. The Beech now is undergoing flight tests and is expected to be ready for service by June 1. Photos (top) show the Model 18-C making a pick-up, and (bottom) the interior arrangements.



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Airline Commentary

For many long years airline houseorgans have printed letters from passengers, telling how much they enjoyed their trip over the line, the wonderful service, etc... We always read these letters, and never yet have we heard a passenger say anything bad about an airline... So now there comes to our desk the latest copy of *Between Ourselves*, Trans-Canada Air Lines' houseorgan... And behold—the editor says that hereafter, in printing letters, the bitter will be mixed with the sweet... "The customer is not always satisfied and it is good for our souls and our efficiency to keep that in mind," he says... Then follows an array of letters, some good, some bad... The bad ones, of course, are more interesting... "I would like to draw your attention to the fact that I could obtain no accurate information as to how long the delay would be in Toronto... This disinclination to advise as to delays and departures seems to be universal with TCA, and is one of the most irritating things to travelers," wrote one passenger... "The young lady disappeared. There seemed to be no one to whom we could go for information—no means of communication with the outside world... It was nearly 30 minutes later before we were advised by a very unprepossessing man (certainly not TCA style)—'flight cancelled,'" wrote another... "... it is most uncomfortable to have to wear your overcoat and wrap yourself up in a blanket and then not be warm," said another... We don't mean to say that airlines throw complaining letters into the wastebasket—they are undoubtedly referred to the proper department—but we congratulate TCA for printing them where all employees can see them...

Ernie Miehl, American Airlines' regional director of cargo sales in Los Angeles, was all scheduled to make a speech before a local gathering... And suddenly disaster struck... One of the Los Angeles newspapers, noting the occasion, said that Miehl would deliver an address on "Aviation's Failure"... Everyone from a vice president on down started calling Miehl's office... He had quite a time convincing them that the correct title was "Aviation's Future"... That misprint probably packed the house...

You have probably heard of the Johnson Rocket, which is a personal aircraft... But American Airlines' *Flagship World* points out that "Pop" Johnson, the head of the household and founder of Johnson Aircraft Co., isn't the only air-minded member of the family... He has three sons, all of whom are airline captains—two with American, one with TWA... The sons, Dave, Dell and Eddie, must pile up quite a bit of flying time for one family... Someone has called the Johnsons the "flyingest family there is," and we'd be inclined to agree... Anyone know of a family with more than three airline captains?...

If you don't think people are interested in looking at airplanes, listen to this: American Airlines has a DC-4 on exhibit at the corner of West 52nd St. and Avenue of the Americas, and in less than three weeks more than 30,000 people paid 25¢ apiece to go through it... All proceeds go to the New York Police Athletic League's fund to provide a recreation program for children... It certainly goes to show you that aviation and airplanes are still glamorous... Incidentally, American had quite a time getting the airplane into New York... It came part way by barge, was then towed by tractors, and was put into position on the lot by two circus elephants...

In the April issue of *Delta Digest*, thumb-nail sketches of the airlines' top personnel were given and T. Preball felt quite flattered at being called "the spritely new assistant chief pilot" until he looked up the meaning of the word and found it to be "a shade, a ghost, spirit, apparition, elf, fairy, goblin"... Rather red-faced, the *Digest* editors confessed that they meant to say "sprightly," which means "having animation, lively, brisk, airy, gay"...

This should probably be classified under the it-can't-happen department... Mr. Clyde Anthony of Kansas City rode to Chicago on TWA... He had return space on Flight 45... Some space opened up on an earlier flight (43) so TWA called him... He misunderstood the call and thought TWA was just giving him a check on his Flight 45 space... When he got to the airport he was told that he had been canceled on 45 and had been a no-show on 43... However, a seat opened up on 45 and TWA got him back to Kansas City... And then, friends, Mr. Anthony appears before Lee Swigart, TWA's district manager in Kansas City and presents a check for \$21.68, which is the one-way CG-KC fare... He insisted that if Flight 43 departed with an empty seat it was his fault and he wanted to pay for it... After Swigart had been revived and was sufficiently conscious to be articulate, he gently and politely refused the money... TWA should at least name Mr. Anthony the "passenger of the year"...

Things-that-you-wouldn't-see-in-the-U. S.: *Shipping World* is a well-known British weekly journal, read by people in the steamship business... The Apr. 24 issue had an advertisement on the front cover from an aircraft cable company... The ad had a picture, taking up most of the cover, of the Tudor II, Britain's new four-engined transport plane...

—ERIC BRAMLEY

Airline Personnel

Administrative

Everett Richard Cook, of Cook & Company, Memphis cotton merchants, has been elected a director of Eastern Air Lines. He served as a colonel during the war, and was Deputy Chief of Staff with the 8th and 12th Air Forces and U. S. Strategic Air Forces. He was also a special assistant to the War Food Administrator, and an adviser to the State Department on wartime economic affairs.

Sidney B. Smith, who served with the AAF during the war and who formerly was with the State Department and Lockheed Aircraft Corp., has joined TWA as assistant to the chairman of the board.

Capt. George A. Dools Jr., former assistant chief pilot of Pan American Airways' Atlantic Division, has been named regional director for the airline in the Middle East, with headquarters at Ankara, Turkey.

Donald B. Montgomery, formerly of the legal department of the Standard Oil Co. of Indiana, has been appointed director of state relations and property for Chicago & Southern Air Lines. **Betty Coy**, styling authority, has been named personnel supervisor of C & S's women employees.

Follman William Kreis, who was with the War Assets Corp. in Washington, is TACA Airways' new assistant director of the plans and projects division. He served overseas three years during the war.

Philip S. Reid, former assistant ground operations manager of PCA, has been named assistant to **Fred M. Glass**, vice president in charge of the company's southern division.



Thigpen Vanderlip Kelly

Jim Webster, former reservations manager for American Airlines in Washington, is now reservations manager for the company in Los Angeles, replacing **Robert Elliott**, who resigned. **Fred Nichols** has been promoted to airport ticket office manager, succeeding **Pat Nowell**, also resigned. **Francis (Bill) Phinney** is now international agent in Los Angeles.

Del Bogart has been promoted by American Airlines from assistant regional manager for reservations to assistant to the district sales manager, **T. P. Gould**. He replaces **L. H. Peters**, who has joined AA's regional staff.

Jay R. Haymond, formerly area cargo manager in New Jersey for United Air Lines, has been appointed superintendent of perishable traffic for the company.

Lt. Col. George Knight, who was PCA's director of telephone and counter sales, has been promoted to assistant to the general traffic manager, **Alex Brower**, formerly district traffic manager in Chicago, and **Bill Henry**, Washington cargo representative, were promoted to passenger sales staff representatives. **M. E. Cole**, former supervisor of reservations, has been appointed assistant manager of station sales, and **Tom R. Foster**, assistant director of purchasing, is now acting director of purchasing.



Sundem Smith Bogart

sion of TWA. **Watson** formerly was with Pan American Airways and **Walter Dorwin Teague**, industrial designer.

Nicholas Craig has been appointed sales manager of Pan American-Grace Airways, with headquarters in New York. For the past three years he has been district manager for Pan American Airways in San Francisco.

Philip M. Siefert, who has been Pan American Airways' assistant airport traffic manager at Miami, has been transferred to Port of Spain, Trinidad, as assistant district traffic manager.

George O. Thorndike, who has just returned from active duty as a commander in the Navy, has been appointed traffic representative for TACA in New York. Prior to the war he was with Grace Line in New York.

Trond A. Sundem, formerly southern division agency manager of Eastern Air Lines, has been named manager of the company's agency department with headquarters in New York.

Jane White, PCA hostess, has been appointed assistant chief hostess for the PCA system. **Virginia Reesa** has been named hostess supervisor for Washington, and **Faye Smith** heads the hostess staff at Detroit.



Craig Watson White

E. O. Alvord, station manager in Youngstown for PCA, has been named district general manager in Youngstown. **Frederick G. Hull**, PCA's Harrisburg station manager, has been promoted to district general manager in Harrisburg. **Stanley Cowen**, former Navy airman and PCA's Washington district sales manager, has been appointed general manager for the Washington district. **Edward A. Clark, Jr.**, former assistant supervisor of station operations in Washington, is now assistant to **R. M. Averill**, vice president of PCA's western region.

Frank A. Vanderlip, Jr., former regional coordinator of defense housing, Executive Office of the President, and former lieutenant colonel in the Army, has been appointed assistant to **T. B. Wilson**, chairman of TWA's board, and director of TWA's investments in foreign enterprises.

W. R. Thigpen, district traffic and sales manager for United Air Lines in New York since 1944, has been named special assistant to the president with headquarters in Seattle.

Don J. Kirkley, formerly with the Office of Inter-American Affairs, has been appointed manager of the press relations division of TACA.

Traffic-Sales

Arthur F. Kelly, formerly Western Air Lines' director of general sales, has been promoted to assistant general traffic manager. Succeeding Kelly as sales director is **Roy Backman**, district traffic manager at San Francisco. **James Keefe**, San Diego district traffic manager, fills Backman's vacancy, and **Sam Spaulding**, formerly with United Air Lines in Des Moines and New York and a lieutenant commander in the Naval Air Transport Service, takes Keefe's place at San Diego. **Philip E. Peirce**, district superintendent of passenger service of the Inland division at Cheyenne, has been promoted to superintendent of stations at Burbank, and **Roland D. Williams** moves from superintendent of passenger service at Great Falls to Cheyenne.

W. E. Parker, former district sales manager in New Orleans for Chicago & Southern Air Lines, has been promoted to agency and interline manager for the company with headquarters in Memphis. He is replaced in New Orleans by **John D. Locke**, formerly supervisor of the contract department of Hamilton Standard Propeller division of United Aircraft Corp. and one-time member of United Air Lines' sales staff.



Alvord Reid Cowen

William G. Preston, former New York City public relations representative for American Airlines, has been named assistant regional director of public relations under **Marshall F. Bannell**, regional director.

Larry Nixon, aviation and travel writer, has joined Pan American Airways' public relations staff. He will direct the company's news bureau in New York.

W. M. Stainton, who has been American Airlines' sales manager in Montreal, has been appointed eastern regional director of international sales. Succeeding Stainton in Montreal is **P. E. Priestman**, former manager of the reservations and ticket office in Toronto.

Thomas F. Dempsey has been promoted from district traffic manager of Continental Air Lines at San Antonio to interline and agency sales representative for the company.

Hubert C. Watson has been named senior staff assistant in connection with traffic, advertising and organizational functions of the International Division.

New Services:

Eastern Begins DC-4 Service; United Opens Big Ship Run To Coast

Eastern Air Lines added DC-4 equipment on its New York-Washington-Atlanta-New Orleans schedules, raising to more than 6000 monthly the number of seats offered on the route. Seating capacity between Washington and New Orleans will be trebled within the next four to six weeks.

Eastern also began daily non-stop flights with DC-4s between Washington and San Francisco. Similar service is being operated by Eastern between New York and Miami.

• United Air Lines inaugurated service with DC-4s between Washington and San Francisco. Intermediate stops include Toledo, Chicago, Denver and Oakland, Calif. The aircraft carry 44 passengers, compared with 56 for Eastern.

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CAB Prods Airlines to Serve Communities Now Suspended

ACTION to bring airline service to 65 certificated points on the domestic system which are designated stops but which are not now receiving scheduled service was taken by the Civil Aeronautics Board in letters to 16 carriers. Board orders cancelled the last of the national defense suspensions for 18 cities; other orders removed restrictions against inaugurating service to eight newly certificated points for national defense reasons. In addition, the Board listed 39 cities not receiving air service as authorized in existing certificates, and asked the 16 airlines involved to submit plans for inaugurating service to these points.

The letters sent out by CAB stated that it believes that "it is of primary importance that all certificated points receive service at the earliest possible moment in accordance with the terms of the certificate of convenience and necessity authorizing the service. It is believed that the air carriers should take all necessary action within their control to expedite the commencement of service."

In cases where "there is no reasonable likelihood of service being provided within the near future" either through necessary improvements of the airports or with the use of flight equipment which is suitable for the present airports," the Board wrote it "may wish to give further consideration to the matter of what action may be required in the public interest to provide air transportation to such communities."

Orders withdrawing the last of the suspensions for national defense reasons were issued to the following seven airlines with 18 cities involved: American Airlines: Niagara Falls, N. Y., Wilkes-Barre, Pa.; Braniff Airways: Ponca City, Oklahoma; Colonial: Glens Falls, N. Y.; Mid-Continent: Aberdeen, S. D., Bismarck-Mandan, N. D., Minot, N. D., Saint

Joseph, Mo.; Northeast: Caribou, Me., Lewiston-Auburn, Me., Millinocket, Me., Waterville, Me.; TWA: Phoenix to Las Vegas, via Prescott, Kingman, and Boulder City; Western: West Yellowstone, Mont.

Additional orders were issued removing the last of the restrictions on the inauguration of service to newly certificated cities imposed for reasons of national defense. Four carriers and eight cities were involved in these orders, as follows:

Continental: Bartlesville, Okla.; **Eastern:** Atlantic City, N. J.; **Northwest:** Green Bay, Wis., Wausau, Wis., Eau Claire, Wis.; **TWA:** Columbia, Mo., Grand Canyon, Ariz., Lancaster, Pa.

The 39 points for which CAB asked the 16 carriers to submit their plans for inaugurating service include: **American:** Ann Arbor, Mich., Binghamton, N. Y., Charleston, W. Va., Elmira-Corning, N. Y., Huntington, W. Va., Jackson, Mich., Kalamazoo, Mich., New Haven, Conn., Parkersburg, W. Va., Scranton, Pa., Springfield, Ill., Utica, N. Y.; **Braniff:** Muskogee, Okla.; **Colonial:** Binghamton, N. Y., Scranton-Wilkes-Barre, Pa.; **Chicago & Southern:** Anderson-Muncie-New Castle, Ind., Bloomington, Ill., Marion, Ind., Pine Bluff, Ark., Springfield, Ill.; **Continental:** Salina, Kan., Trinidad, Colo.; **Delta:** Anderson-Muncie, Ind., Lexington, Ky.; **Eastern:** Charleston, W. Va., Florence-Sheffield-Tusculum, Ala., Lexington-Frankfurt, Ky.; **Inland:** Hot Springs, S. D., Spearfish, S. D.; **Mid-Continent:** Ottumwa, Ia., Quincy, Ill.; **National:** Gulfport, Miss., Savannah, Ga.; **Northeast:** Manchester, N. H., Provincetown, Mass., Waterbury, Conn., White River Junction, Vt.; **Northwest:** Jamestown, N. D.; **PCA:** Charleston, W. Va., Sault Ste. Marie, Mich., Wheeling, W. Va.; **TWA:** Binghamton, N. Y., Wheeling, W. Va.; **United:** Merced, Calif., Modesto, Calif., Tacoma, Wash.; **Western:** San Bernardino, Calif.

The Board also informed those carriers holding temporary certificate amendments or exemption orders establishing certain services for national defense consideration that action would be taken following consultations with the military.

CAB Activities

By Daniel S. Wentz II

Route Consolidations—Four major carriers stressed in oral argument before the CAB the need for consolidation of routes, which would permit better utilization of four-engine equipment by eliminating junction points. The carriers were American, seeking consolidation of Routes 4, 18 and 23; PCA, for Routes 14 and 32; TWA, for Routes 2, 37, 36, 61 and 67, and United, for consolidation of Routes 62 and 66 into Route 1.

Procedural Changes—The Board passed along to its economic bureau authority to approve or disapprove any special tariff applications not involving questions of policy and to the chief examiner authority to approve or disapprove petitions of intervention. The move was designed to lighten the Board's load of routine matters.

Asks Permit—Air France asked the CAB in a hearing for a foreign air carrier permit to operate between New York and Paris. The service will be started in June if the permit is granted in time, Air France witnesses said. The company has received an operating grant of \$80,000,000 from the French government. Pan American and the International Association of Machinists opposed that part of the application which asked for a route from Paris to New York and beyond to Mexico City.

Counsel Resigns—George C. Neal, general counsel of the CAB, resigned effective July 1 to enter private law practice with L. Welch Pogue, retiring chairman of the Board. Neal joined the CAB in 1938.

Opposes Report—An examiner's report opposing the merger of Mid-Continent Airlines and American Airlines has "erected a barrier of generalities against the development of air transportation in the Mid-Continent region," American declared in a brief filed with the CAB.

SUMMARY OF U. S. DOMESTIC AIR TRANSPORT OPERATIONS FOR February, 1946

Compiled by American Aviation Publications from Official C.A.B. Data.

REVENUES
&
EXPENSES

AIRLINES	TOTAL OPERATING REVENUES	PASSENGER REVENUES	MAIL REVENUES	EXPRESS REVENUES	FREIGHT REVENUES	TOTAL OPERATING EXPENSES	AIRCRAFT OPERATING EXPENSES	GROUNDS & INDIRECT EXPENSES	OPERATING REVENUE PER NET MILE	OPERATING EXPENSE PER NET MILE	NET INCOME BEFORE INCOME TAX	NET PROFIT OR LOSS	TOTAL ASSETS
All American	49,442	.....	48,936	198	.....	61,008	31,204	29,804	41.79	51.54	208,781	148,123	1,753,684
American	3,820,265	3,359,398	251,939	85,902	64,314	4,351,238	1,538,881	2,812,357	91.74	104.54	586,656	317,135	74,682,670
Braniff	650,086	583,120	33,370	16,738	1,858	748,139	288,308	459,830	85.74	98.64	92,863	55,719	9,045,461
Caribbean	28,516	27,814	1,212	849	.....	41,352	19,088	22,264	83.84	121.64	28,249	28,249	157,482
C & S	448,296	417,558	16,149	10,212	.....	521,655	208,897	312,758	86.94	101.14	68,053	68,053	3,805,003
Colonial	174,293	132,078	10,466	900	.....	197,315	77,035	120,280	93.84	106.34	24,046	24,046	3,292,913
Continental	283,076	228,551	49,892	1,444	109	302,663	125,690	176,973	90.54	96.54	76,664	22,101	2,544,131
Delta	246,101	189,865	39,000	14,004	.....	633,328	232,772	400,556	88.54	102.34	84,883	46,004	5,428,129
Eastern	2,594,315	2,340,516	139,312	70,536	6,331	2,169,430	802,367	1,307,062	96.04	80.34	480,925	288,925	31,924,329
Execair	23,416	13,343	14,328	135	.....	44,063	20,646	23,417	49.24	73.74	22,575	22,575	965,690
Inland	194,568	166,392	789	8,112	9,676	190,577	66,669	83,907	176.14	133.54	88,172	48,172	2,144,116
NCA	132,013	70,424	46,718	593	.....	339,169	71,785	67,384	84.04	88.64	7,306	7,306	696,298
NCA	322,078	243,724	72,654	3,748	.....	302,658	133,451	169,207	96.54	90.84	14,869	19,311	2,329,795
National	409,844	358,900	31,752	3,604	.....	469,295	206,784	262,510	75.74	86.74	39,853	39,853	5,700,760
Northeast	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.	Report for January and February not yet available.
Northwest	1,036,747	907,222	94,506	29,162	.....	1,124,196	465,785	668,410	88.04	96.34	116,087	23,335	13,441,633
PCA	913,909	851,073	34,105	19,515	.....	1,325,001	490,165	878,835	83.74	121.44	428,857	429,057	17,719,272
TWA	2,773,338	2,293,862	326,962	79,100	26,175	3,795,052	1,347,193	2,407,859	93.54	128.04	1,072,601	662,182	50,908,441
United	2,995,478	2,481,922	340,097	118,307	33,245	3,392,680	1,202,129	2,190,551	85.14	96.44	339,377	339,377	53,715,899
Western	559,943	497,447	27,190	5,590	673	646,190	290,032	356,117	96.14	112.34	96,038	96,038	5,880,076
TOTALS	17,961,628	15,454,813	1,985,884	468,693	144,285	20,426,999	7,678,928	12,746,061	90.14	102.44	2,228,013	1,632,297	295,710,960
* Includes certain operating costs chargeable in part to TWA's international service, since complete allocation of joint expenses has not yet been accomplished.													
Eastern's Revenue and Expense Statistics for JANUARY													
Eastern	2,613,841	2,397,577	137,976	102,841	4,475	2,140,801	845,480	1,295,320	94.34	77.34	561,318	339,318	31,177,069



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CAB Proceedings

(A Summary of Applications Filed, Orders Issued, and Future Actions of the Civil Aeronautics Board.)

Applications:

Aerovias Latino Americanas, S. A., 45 B Calle Ruben Dario, San Salvador, El Salvador, for a foreign air carrier permit authorizing scheduled mail, passenger and property service over an 1150-mile route between San Salvador and New Orleans. (Docket 2305).

Air France, 24 State Street, New York 4, N. Y., for a foreign air carrier permit authorizing scheduled mail, passenger and property service in accordance with the U. S.-French Air Transport Agreement of March 27, 1946, on routes from (1) France to Boston, New York, Washington and the site of the United Nations Organization; (2) France to Montreal and Chicago; (3) France to New York and beyond to Mexico; (4) Martinique via Guadeloupe via other intermediate points to Puerto Rico and beyond via the Dominican Republic to Haiti; and (5) Indo-China via points in China and Hong Kong to Manila, subject to the approval of the Government of the Philippine Islands. (Docket 2287).

Alaska Coastal Airlines, Juneau, Alaska, for an amendment to its Ketchikan-Juneau route certificate to include Sitka as an intermediate point. (Docket 2289).

Alaska Coastal Airlines, Juneau, Alaska, for an exemption order authorizing service to Sitka as an intermediate point on its Ketchikan-Juneau route. (Docket 2290).

Peter A. Barnacki, 222 Spring Garden Street, Philadelphia 23, Pa., for a permanent certificate authorizing the applicant to operate as an air freight forwarder. (Docket 2304).

Capital Airlines, Inc., P. O. Box 76, Jackson, Miss., for a permanent or temporary certificate authorizing scheduled mail, passenger and property service over 1366 miles of route between Little Rock, Ark., and Miami, and between Nashville, Tenn., and Jackson, Miss., both via various intermediate points. (Docket 2282).

Delta Air Lines, for consolidation of its Routes 24 and 54. (Docket 2288).

Emery Air Freight Corp., 150 Broadway, New York, N. Y., for a certificate authorizing the applicant to operate as an air freight forwarder over existing airlines between all points in the United States, its territories and possessions, and foreign countries. (Docket 2300).

Federal Air Freight, 518 Felt Building, Salt Lake City, Utah, for a permanent or temporary certificate authorizing scheduled property service between New York and New Orleans, Washington, Miami, Atlanta, Kansas City-St. Louis, Detroit, Chicago, Pittsburgh, Boston, Cincinnati, Los Angeles, San Francisco, Seattle, Dallas, Brownsville, Phoenix, Nogales, El Paso, and Minneapolis, between Chicago and New Orleans, and between Houston and Denver. (Docket 2309).

Mercury Transport Corporation, 25 Broad Street, New York, N. Y., for a permanent or temporary certificate authorizing scheduled property service between the following areas (including major terminal and co-terminal points): Seattle-Portland area; San Francisco area; Los Angeles-San Diego area; Denver area; Minneapolis area; Kansas City-St. Louis area; Dallas-Houston-San Antonio area; Chicago-Milwaukee area; New Orleans area; Detroit-Cincinnati-Pittsburgh area; Boston-New York-Philadelphia area; and Miami area. (Docket 2299).

Mutual Aviation, Inc., 2080 Military Road, Tona-wanda, New York, for a permanent or temporary certificate authorizing scheduled mail and property service between New York-Newark and Chicago, New York-Newark and St. Louis, Boston and St. Louis, Philadelphia and Chicago, Philadelphia and

Cleveland, and between Philadelphia and Buffalo, N. Y., all via various intermediate points. (Docket 2298).

Norseman Air Transport, 78 Farmington Avenue, Longmeadow, Mass., for a permanent or temporary certificate authorizing scheduled property service over a 2792-mile route between New York and San Francisco via Philadelphia, Harrisburg, Pittsburgh, Akron, Detroit, Chicago, Kansas City, Denver, and Salt Lake City. (Docket 2301).

Norseman Air Transport, 78 Farmington Avenue, Longmeadow, Mass., for a permanent or temporary certificate authorizing scheduled property service over a 1772-mile route between Boston and Miami via Bridgeport, Conn., New York, Philadelphia, Baltimore, Washington, Richmond, Raleigh, N. C., Charleston, S. C., Savannah, Jacksonville, Orlando, Fla., and Tampa, Fla. (Docket 2302).

Norseman Air Transport, 78 Farmington Avenue, Longmeadow, Mass., for a permanent or temporary certificate authorizing scheduled property service over a 1270-mile route between Chicago and Miami via Anderson-Muncie-New Castle, Ind., Cincinnati, Lexington, Ky., Knoxville, Tenn., Atlanta and Albany, Ga., and Tallahassee and Tampa, Fla. (Docket 2303).

Orders:

4725—Authorizing Pan American Airways, by temporary exemption order to terminate September 30, 1946, to serve the Azores through the land airport at Santa Maria in lieu of the seaplane base at Horta. (Docket 2276).

4726—Denying a petition of Eastern Air Lines asking the Board to revoke and reconsider Board Order 4549 which had authorized Delta Air Lines to operate non-stop between Chicago and Atlanta on Route 54.

4727—Dismissing Pan Atlantic Steamship Corporation's application in Docket 730 from the Boston-New York-Atlanta-New Orleans Case (Docket 730 et al.) at the company's request.

4728—Denying a petition of the City of Anderson, S. C., for severance from the Southeastern States Case (Docket 501 et al.) of Eastern Air Lines application for the inclusion of Anderson as an intermediate point on its Route 5 and for the issuance of a special report approving the application.

4729—Dismissing the application of Automatic Air Mail, Inc., Docket 415, from the North Central Case (Docket 415 et al.) at the applicant's request.

4730—Permitting Transcontinental & Western Air to intervene in Northwest Airlines' Routes 3, 45, and 69 Consolidation Case. (Docket 2018).

4731—Consolidating in the Arizona-New Mexico Case (Docket 968 et al.) applications of: Border Airlines, Docket 968; TWA, Docket 1041; William Beatus, Docket 2292 (severed portion of Docket 1489); Air Transit Company, Docket 1707; Lucius S. Smith, Docket 2293 (severed portion of Docket 1719); Mrs. T. W. Lesier, Docket 1783; United Air Lines, Docket 1923; Silver States Airways, Docket 2294 (severed portion of Docket 2135); Western Air Lines, Dockets 2227, 2296, and 2297 (Docket 2296 is a severed portion of Western's Docket 2224; Docket 2297 is a severed portion of Western's Docket 2228); Southwest Airways Company, Docket 2221; Arizona Airways, Inc., Docket 2295 (severed portion of Docket 2223); Texas-New Mexico Air Lines, Docket 2213; and Federal Airways Company, Docket 2222; authorizing American Airlines, Braniff Airways and Continental Air

Lines to intervene in the consolidated proceeding; and denying Eastern Air Lines' motion for inclusion in the case of its application in Docket 2148.

4732—Approving a series of agreements between American Airlines and other members of the Air Traffic Conference of America relating to resolutions of the Conference covering airline reservations, ticket, baggage procedures, guide publications, and custodial service of joint airport offices. (Agreements C.A.B. Nos. 245 A-2, 245 A-3, 245 A-4, 261, 264, 310, 334, 334 A-1, 334 A-2, 335, 339, 397, 399, 399 A-1, 400 and 467).

4733—Denying a petition of Midwest Airways, Inc., for leave to amend its application in Docket 127, consolidated with the North Central Case (Docket 415 et al.), after hearing and the issuance of an examiners report.

4734—Denying a motion of Continental Air Lines which requested that the North Central Case (Docket 415 et al.), insofar as it involves service between Kansas City and Chicago or between Denver and Chicago, be consolidated with the Mississippi Valley Case (Docket 548 et al.) for oral argument and decision.

4735—Permitting the Cities of Burlington, Iowa, and LaCrosse, Wis., and Columbian Airlines, Inc., to intervene in the North Central Case (Docket 415 et al.).

4736—Modifying previous Board orders prohibiting the public disclosure of agreements between Pan American-Grace Airways (PANAGRA) and certain foreign countries. (Agreements Nos. C.A.B.-FG 7 to 13 inclusive) and between Pan American Airways and certain foreign countries (Agreements Nos. C.A.B.-FG 14 to 54 inclusive and No. C.A.B.-FG 56) to permit the transmittal of copies of those agreements to the Secretary-General of the Provisional International Civil Aviation Organization (PICOA) pursuant to the obligations of Member states under the Interim Agreements.

4737—Permitting the City of Boston, Mass., and the International Association of Machinists to intervene in the Pennsylvania-Central Airlines-Northeast Airlines Merger Case. (Docket 2168).

4738—Authorizing American Airlines, United Air Lines, Northwest Airlines, the Great Falls Chamber of Commerce and the Minot Association of Commerce to intervene in the Chicago-Seattle Case (Docket 1602 et al.).

4739—Permitting Westland Airlines to intervene in the Texas-Oklahoma Case. (Docket 337 et al.).

4740—Authorizing the Cities of Peoria, Moline and Rock Island, Ill., the City of Davenport, Iowa, and the Peoria Association of Commerce to intervene in the North Central Case. (Docket 415 et al.).

4741—Permitting Wien Alaska Airlines to intervene in the certificate proceeding on the application of Roy H. Curtiss in Docket 2152.

4742—Dismissing the application of Inland Air Lines in Docket 900 at the carrier's request.

Calendar:

June 1—Date for exchange of exhibits in the Arizona-New Mexico Case. (Docket 968 et al.).

June 3—Tentative hearing date in the Chicago-Seattle Case. (Docket 1303 et al.). Examiner Herbert K. Bryan.

June 3—Briefs due in the Middle Atlantic Area Case. (Docket 674 et al.). Postponed from May 15.

June 3—Exchange of exhibits in the Eastern Air Lines-Delta Air Lines Consolidated Route Consolidation Case. (Dockets 1971 and 2298).

June 3—Briefs in the Texas-Oklahoma Case due. (Docket 337 et al.).

June 10—Hearing on applications proposing mail and property service by helicopter in the Los Angeles Area. (Docket 896 et al.). Examiner Ferdinand D. Moran.

June 10—Hearing in the Boston-New York-Atlanta-New Orleans Case. (Docket 730 et al.). Examiners Ralph L. Wiser and Lawrence J. Kosters.

June 14—Exchange of exhibits in United Air Lines' Detroit-New York and Detroit-Allentown (Pa.) Non-Stop Cases. (Docket 2216 and 2277).

June 15—Exchange of exhibits in the Arizona-New Mexico Case. (Docket 968 et al.).

June 15—Deadline for rebuttal exhibits in the Eastern Air Lines-Delta Air Lines consolidated route consolidation case. (Dockets 1971 and 2288).

June 24—Hearing in the Eastern Air Lines-Delta Air Lines consolidated route consolidation case. (Dockets 1971 and 2288). Examiner J. Earl Cox.

June 25—Hearing on United Air Lines' applications for Detroit-New York and Detroit-Allentown (Pa.) Non-Stop Authorizations. (Dockets 2216 and 2277). Examiner James S. Keith. Tentative.

July 5—Rebuttal exhibits in the Arizona-New Mexico Case due. (Docket 968 et al.).

July 22—Hearing in the Arizona-New Mexico Case. (Docket 968 et al.). Tentative.

COX and STEVENS AIRCRAFT CORP.

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Airports Roundup

Property Depreciation May Be Aftermath of Airport Construction

Cities planning airport construction may expect substantial depreciation of property values in the vicinity of the airport site, according to J. B. Bayard, Jr., director of the joint airport division of the planning firms of Horner and Shifrin of St. Louis and Smith Hinchman & Grylls, Inc., of Detroit.

Bayard told a recent annual planning conference of the American Society of Planning Officials in New York that on the basis of a study made of five prospective airport sites made for the Detroit Metropolitan Aviation Planning Authority, the average depreciation of subdivision property within a half mile of the airport site varied from a maximum of 92.7% to a minimum of 74.4%.

● Army regulations governing the use of government-owned or operated military airfields were relaxed to permit freer use of such fields by private and commercial plane operators. The new regulations prohibit the use of active military fields as a base, but provide that such fields may be used by civil aircraft at the discretion of the commanding officer of the base.

● Weir Cook municipal airport, Indianapolis, established a new schedule of fees for scheduled and non-scheduled air transport operations. Scheduled operators will be charged \$50 each per month for the first two scheduled landings, with fees scaling down thereafter. Non-scheduled operators will be charged \$10 each for the first 10 landings in a year, with a graduated scale thereafter.

● Idaho Bureau of Aeronautics reported three airports under construction in the state with plans underway for construction of 10 more. New airports are being built at Shoshone, Bancroft and at New Meadows. Airports also are planned at Council, Craigmont, Bonners Ferry, Downey, Grace, Albion, Cambridge, Nez Perce, Cottonwood, and Genesee.

● The Florida Supreme Court ruled recently that it is illegal for a city to pass an ordinance prohibiting the construction of an airport within the city limits on the basis that it is a nuisance. The court held that an airport is economically important to any community.

● Louisiana State Aeronautics Commission predicted that every town in the state 2500 or more population will have an airport within 10 years. The state's present airport facilities are valued at \$57,000,000, with approximately \$15,000,000 to be spent within the next decade.

● Lambert Field, St. Louis, reported that the number of airport passengers almost doubled within the last fiscal year. Airlines operating off the field handled 233,000 passengers during



Mansfield's Sky Club—Pictured here is the new airport restaurant and club building developed at the Mansfield, O., municipal airport by James R. Harrington, fixed base operator and president of Harrington Air Service. The \$125,000 establishment has a seating capacity for 385 persons with the club and dining room enclosed in a glass flight deck overlooking Mansfield's new \$2,000,000 airport.

the past fiscal year, compared with 183,000 in the previous year. Air express shipments during the last five years have increased from 267,000 pounds to 1,751,000 pounds.

● Joplin, Mo., municipal airport reported in an audit that its net cost to the city in 1945 was only \$1287, and for the first four months of 1946 was only \$226. Receipts for 1945 totaled \$12,482, compared with expenditures of \$13,770. Gasoline sales totaled \$8,792.

● Wilmington's (Del.) Du Pont airport is again operating on a full commercial scale. Activities were curtailed during the war and space was rented to All American Aviation on a temporary basis.

● Hyannis Airport, Cape Cod, Mass., has been released to the community for commercial operations by the Navy. The airport offers complete flight service.

● Norwood Airport, Norwood, Mass., has established its own weather forecasting station, operated by Weather Advisors, Inc. The facility will be available to fliers using the airport. The forecasts will be furnished chiefly on a contract basis.

● A program of minor improvements to increase space utilization at LaGuardia Field is under consideration by airport officials. Any work done will be paid for by the airlines, rather than the city.

Amendments Planned To Use Airport Funds

Amendments to the Federal Aid Airport Act to authorize use of funds for large airport projects during fiscal 1947 were introduced in the House and Senate on May 13, the same day that President Truman signed the original bill into law.

Purpose of the amendments introduced by Sen. Pat McCarran (D., Nev.) and

Rep. Alfred L. Bulwinkle (D., N. C.), is to remove a restriction in the Airport Act which would prevent use of airport funds for Class IV and V projects until after July 1, 1947. The Airport Act requires that the Administrator of Civil Aeronautics submit recommendations regarding specific Class IV and V projects to Congress two months before the beginning of a new fiscal year. Since the bill only became law in mid-May, it was not possible for the Administrator to comply with this provision for use of large airport funds during the coming fiscal year.

A special ceremony attended by members of Congress and government officials concerned with development of aviation marked the signing of the Airport Bill.



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In the fields of Aviation Operation, Engineering, Aviation Maintenance Engineering, and Aeronautical Engineering, graduates of Parks Air College have advanced to such representative positions as these:

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Write or wire Oliver L. Parks, President, for full information about Parks Air College and Parks graduates.

PARKS AIR COLLEGE, INC.
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Santa Maria Field—Little photographed Santa Maria Field in the Azores is shown in this Air Transport Command photo. The field, located on the southwest portion of the island, has an altitude of 3000 feet. The photo, taken Aug. 25, 1945, shows USAAF installations at right.

Development of Supersonic Speeds Brings High Costs

Prototype Planes May Run To \$1500 a Pound, Planners Say

By FRED HUNTER

ASTRONOMICAL COST figures are being encountered by aircraft engineers shooting at supersonic speeds and seeking to develop new, improved aircraft.

The cost of designing, engineering and producing the prototype of a new model plane has increased steadily through the war years, not only because of increased costs of material and labor, but because of the more expensive character of modern planes.

In the mid-thirties engineers could count on a cost of about \$55 a pound in coming up with a new type aircraft. Today, that cost runs approximately \$375 a pound.

As an example, Robert E. Gross, president of the Lockheed Aircraft Corporation, entered into an agreement with the Army to produce the first P-38 for \$160,000. That's what it looked like the cost would be at that time. Before the prototype was completed it cost \$800,000. That's how modern design sent costs skyrocketing.

In the developing of supersonic speed craft, aircraft engineers foresee costs mounting to as much as \$1,500 per pound for a prototype plane.

In this connection, the chief engineer of one West Coast manufacturer, staggers the imagination in outlining some of the physical needs for the development of supersonic speed planes and missiles.

"It is quite conceivable that the public might have to foot a two billion dollar research bill if this nation is to make the progress that's possible in the air," he said.

For example, he said that it would require 175,000 horsepower for a wind tunnel to make full tests of a supersonic plane the size of the average fighter plane. It might require, he said, as much as 10,000,000 horsepower to set in motion a 20-foot wind tunnel for missiles designed to travel 10 times the speed of sound. For purposes of cost contrast, he pointed out that Boulder Dam produces only about 1,000,000 horsepower. The only way to operate such a wind tunnel would be by direct water power, placing it below a high lake such as the Germans did at Lake Constance.

The Aircraft Industries Association recently has been engaged in making studies of the nation's requirements with regard to research and development facilities and is working with the Army, Navy and NACA in trying to arrive at a program in keeping with the technological needs of national security. One recommendation will be that research facilities be centered under one group because of the cost problem.

Heads Rocket Society

Lovell Lawrence, Jr., president of Reaction Motors, Inc. of Pompton Plains, N. J., has been elected president of the American Rocket Society, national association of rocket and jet propulsion engineers. Reaction Motors is engaged in the development of liquid-fuel rocket motors for the Army and Navy.

Manufacturing Briefs

● Piper Aircraft is running flight tests on a prototype of an experimental all-metal, low-wing, retractable landing geared "Skysedan" for personal and all-purpose charter service. Company engineers claim for it a top speed of 160 mph and a cruising radius of 620 miles on 40 gallons of gas at a cruising speed of 140 mph. It will use a Continental 165 hp engine. Production is not expected until mid-1947. Incidentally, Piper recently completed its 20,000th plane since the firm was founded in 1931 and the 3,489th plane since V-J Day.

● Aircooled Motors, Inc. of Syracuse, N. Y. has put into production a completely new Franklin 215-hp engine, known as the Franklin "500" to power the Republic "Seabee" amphibian. The 485 lb. engine develops 215 hp at 2500 rpm with 80-octane gas. Its long drive shaft extension makes it adaptable for pusher-type installations.

● Allison Division of General Motors has taken over Maywood Plant No. 5 at Indianapolis from the RFC for the building of jet and reciprocating engines for the AAF. Plant No. 10 at Weir-Cook Airport will continue to be used for the designing and flight testing of Allison engines.

● William S. Jack has become president of the Jack and Heints Precision Industries, Inc., a corporation recently formed by the merger of Jack and Heints with Precision Products Corp. and a later merger with Elsemann Corp. When the firm was first founded, Jack was named chairman of the board and the presidency went to B. C. Milner, New York industrialist. In the switch, Jack was made president, Milner became chairman of the executive committee, and Byron C. Foy, Chrysler Corp. director, was made chairman of the board. Jack said that material shortages would force the company to let some of its 7,000 associates go shortly.

● The Cairns Corp. plant and facilities at Port Washington, L. I. has been turned over to Commonwealth Aircraft, Inc. for the full-scale production of the Commonwealth Trimmer. Trimmer production was moved from the Columbia Aircraft Corp. plant at Valley Stream, L. I. to give more space for the production of the Commonwealth Ranger.

● Approved type certificate No. 1 for helicopters has been awarded officially to Bell Aircraft Corp. for its Model 47. The craft was originally earmarked to receive aircraft type certificate No. 774, but it was later decided to begin a new classification for helicopters.

● Nelson Aircraft Corp. has changed the name of the production model of its auxiliary-powered soaring plane to the "Dragonfly". The prototype was called the "bumblebee", but that name has been abandoned.

● Heath Co. of Benton Harbor, Mich. has announced development of a Fiberglass-reinforced plastic float for lightplanes, which they claim to have substantial weight and durability advantages over the conventional metal or plywood float. The floats are moulded in two sections so that a damaged section can be replaced with a screwdriver. Left and right floats are interchangeable, so that only one spare is needed. Commercial production is expected in July.

● De Havilland Engine Co. of England claims to have developed a pure-jet turbine engine, the "Ghost", capable of delivering 5,000 lbs. of static thrust at 600 mph, and corresponding to 12,000 hp in a propeller-driven plane. It is a more powerful adaptation of the de Havilland "Goblin" jet engine.—C. R. V.

Rochlen Serves On Industry Group To Boost Cooperation

A. M. Rochlen, director of industrial and public relations for Douglas Aircraft Corp., was a delegate to the recent plenary session of the International Labor Office Metal Trades Committee meeting in Toledo, at which representatives of American industry laid down a program of five fundamentals as the basis for co-operation between labor and management for reconstruction and prosperity throughout the world. The five-point program included full employment, based on full production, preservation and extension of democratic competitive capitalism and the principles of collective bargaining.



Rochlen

20 Commercial Planes Allocated; AT-19s Will Be Offered for Sale

Twenty commercial twin and four-engined aircraft were allocated by the War Assets Administration during the past three weeks.

Those allocated aircraft are as follows: C-54B: Willis Air Service, Teterboro, N. J.; Ralph Cox, New York City; Peninsula Air Transport, Miami, Fla.; W. Deering Howe, operating Transair, Inc., New York; Col. N. P. Eads, operating Allied Freight Airlines, Inc., Los Angeles; Trans-Tropic Airlines, Miami; Robert F. Gira, Los Angeles; Air Travel, Inc., San Francisco; Ray T. Elsmore, Menlo Park, Calif.; and William L. Word, Oakland, Calif., one plane each.

Douglas C-47B: Earl McS. Hyde, Jr., Clinton, Md.; Civil Aeronautics Administration; University of Illinois, Institute of Aeronautics, Urbana, Ill.; Pacific Airlines, Los Angeles; and Standard Aircraft Co., Los Angeles, one each. The latter two are veterans' organizations.

Douglas C-47A: Civil Aeronautics Administration, and Samuel W. Brod, Clarendon Hills, Ill., a veteran, one each.

Grumman Goose: Lt. Cmdr. T. R. Wenk, Seattle, Wash., a veteran, one.

Douglas C-53: Continental Air Lines and Delta Air Lines, one each.

More than 350 surplus Stinson AT-19 cabin monoplanes, former lend-lease aircraft returned by the British, will be offered for sale June 3 at \$1,500, \$2,000 and \$2,500 each, depending on their condition. The planes are located at Chambers Field, Naval Air Station, Norfolk, Va.

War Assets also announced that 219 twin-engine Cessna aircraft, in unflyable condition, would be offered for sale at \$400 per plane with wooden propellers and \$600 for those with constant speed propellers.

A general scaling down of prices on several types of surplus aircraft to bring prices more in line with present condition of individual planes also was announced by WAA. While the general overall price range was retained, prices for individual aircraft were dropped at least one bracket after inspections had shown deterioration following winter storage in the open.

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35% made FLYING their first choice. This is more than twice the number of preferences for the second magazine and equal to the total preferences for the second, third and fourth magazines combined.

75% indicated FLYING as one of their three choices for advertising, as compared with 43% for the next magazine.

FLYING

DOMINATES THE PRIVATE PLANE MARKET

with

237,645

NET PAID CIRCULATION (ABC)

Blanket coverage of private plane market...from aviation enthusiasts, through pilots, private plane owners, fixed base operators, distributors and manufacturers.

FLYING

an overwhelming first choice for advertising to the personal plane market

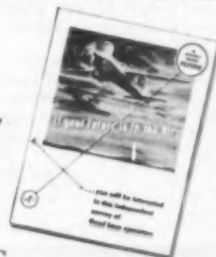
An advertising agency asked every fixed base operator in the country which of *nine* leading aviation magazines they preferred for advertising the products they sell.

The results were sensationally in favor of FLYING. They proved conclusively that in the opinion of fixed base operators FLYING is your best bet for selling everything from parts to planes.

The opinion of these men is valuable because they are your dealers and distributors in the private plane market. They are the backbone of your sales effort... the men on whom you must rely to sell and move your products. When these men choose FLYING as the preferred advertising medium they do so because they see the results at first hand... they know from experience that no other aviation publication can compare with FLYING'S advertising power in the consumer market.

send for your copy of this complete survey

Ask your FLYING representative for the full story of the nationwide independent poll of fixed base operators, or write direct to FLYING. You will be interested in the convincing story it tells.



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TO PAY FOR
TO INSTALL
TO OPERATE
TO SERVICE

Here is a "packaged" portable radio station than can earn more dollars for you now! Join the growing number of small airport operators throughout the country who have found the way to increased revenue with the Radio Receptor Type TL-25-A Transmitter for airport traffic control.

This transmitter combines engineering features that guarantee simple and economical installation, operation and maintenance. A flexible circuit design will accommodate projected changes in frequency range. The transmitter may be installed for tower operation, or located two miles distant from the operator's control unit.

The above transmitter with the control cabinet assembly consisting of the transmitter remote control unit, loud speakers and two fixed frequency airport receivers, Radio Receptor Type RH-1-A affords the small operator a completely packaged radio equipment for his airport.

1. An exceptionally compact, minimum-weight 25-watt output transmitter. Frequency range 200-400 KC.

2. Entire unit may be rolled out of cabinet on self-contained tracks... flexible cables to socket receptacles — combine to provide front-of-unit servicing while transmitter is in operation.

3. All important current and voltage values are indicated on direct-reading dials; no conversion factors required.

4. Convenient dials and button controls, together with simple switching of Remote Control Unit, makes possible easy operation by inexperienced personnel.

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Manufacturing Personnel

Charles Friedman has been named assistant sales manager in charge of airport and airlines communications and traffic control equipment for Radio Receptor Co.

Felix Walitkus has been named to the customer-liaison unit of the Boeing Aircraft sales department. Joseph C. Anderson and William P. Kennedy have been appointed to Boeing's sales engineering units. Harry Fisk has been named division superintendent in charge of experimental shops and Howard Hurst has been appointed division superintendent of experimental bomber project.



Roseberry

Evans

Olsen

Col. Francis S. Gabreski, top ranking ace in the European war theater, has joined the sales staff of Douglas Aircraft Co.

Bob Blaine, former dispatcher for United Air Lines, has been appointed assistant to Rhonda Reitze, sales and advertising manager of Nelson Aircraft Co., San Fernando, Calif.

Fred P. Laudan has been named coordinator of experimental engineering and manufacturing of Boeing Aircraft Co.

George F. Chapline, former vice-president of Wright Aeronautical Corp., has joined Ranger Aircraft Engines Division of Fairchild Engine & Airplane Corp., as assistant general manager.

Robert G. Hoof has been put in charge of Bendix Aviation Corporation's postwar electrical sales program. He will be assisted by William P. Harrison.

Gordon W. MacKinney has been named assistant manager of the installation department of Curtiss-Wright Corp., Propeller Division.

Walter C. Pague, recently discharged from NATS, has been named chief pilot in the aviation department of American Rolling Mill Co., Middletown, O.

E. L. "Jack" Roseberry, former chief of stores for the Atlantic division of Pan American Airways, has joined Goble Aircraft Specialties, Inc.

Thomas I. Case has been appointed assistant domestic sales manager of Piper Aircraft Corp.

B. A. Evans has been named manager of the wheel and brake manufacturing department of the B. F. Goodrich Co.

Dean W. Given has been appointed general sales and advertising manager of Aviometer Corp., manufacturers of communications equipment.

F. K. McCune and B. R. Prentice have been appointed members of General Electric's apparatus design engineering staff.

Charles W. Hamilton, former Dayton representative of Douglas Aircraft Co., has been named manager of the company's newly created sales development group.

Eric Olsen, formerly consulting engineer for Lockheed Aircraft Co., has been named manager of the new aviation division of Wayne Pump Co.

R. Schermerhorn, Jr., controller of the Glenn L. Martin Co., has been elected a director. G. T. Willey, vice-president-manufacturing, also was named a director, replacing Harry F. Vollmer, who resigned as a vice-president and director.

Lauren D. Lyman has been elected vice-president in charge of public relations of United Aircraft Corp. Rex Beisel, general manager of Chance Vought Aircraft division of United, and William P. Gwin, general manager of Pratt & Whitney division, also were elected to vice-presidencies.



Laudan

Gabreski

Blaine

Financial Review

Eastern Declares New Dividend Payment As Profits Continue Rise

Board of directors of Eastern Air Lines adopted a dividend policy of 50c per year on the company's common stock, which recently was split on a four-for-one basis. This in effect doubled the \$1 dividend paid in 1945 on the stock prior to the split-up.

Eastern declared a semi-annual dividend of 25c per share on May 21, payable June 28 to stockholders of record at the close of business June 7. Eastern's net profit for the first quarter of this year was 75% above the net profit for the same period in 1945, equal to \$1.31 a share on the old stock basis and 33c per share on the newly split stock.

Hawaiian Airlines reported a net profit of \$173,803 after all taxes in 1945, compared with a net profit of \$75,208 in 1944. Gross operating revenues in 1945 were \$2,316,000, compared with \$1,729,000 in 1944. Operating expenses increased \$192,000 or 14% over the \$1,409,000 in 1944.

United Air Lines reported a net loss, after taxes, of \$512,541 for the first quarter of this year, compared with a profit of \$1,179,046 in the first quarter of 1945. Operating revenues for the quarter rose 17% compared with a year ago, but expenses increased 60%, reflecting a 43% increase in airplane miles and higher wages and expansion costs.

American Airlines reported a net loss of \$447,648 for the first quarter of this year, compared with a net profit of \$1,252,377 for the same period in 1945. Operating revenue totaled \$12,198,578 for the three months period, as against \$12,158,242 operating expenses. The company excluded from its profit and loss the estimated net cost amounting to \$408,706 which resulted from delays in relocating personnel from military contract to commercial operations and for retraining personnel.

Mid-Continent Airlines reported that its operating revenues in 1945 were 62% ahead of those in 1944, with a net income equivalent to 44c per share, compared with 35.7c per share in the previous year.

Fairchild Engine and Airplane Co., reported net income of \$688,034, after taxes, in 1945, compared with a net of \$1,173,123 in 1944. Earnings were 34c a share in 1945, compared with \$1.12 in the previous year. Total sales in 1945 were \$41,831,481, compared with \$93,212,963 in 1944.

The Sperry Corp., reported net income, after taxes, of \$7,954,437 in 1945, compared with \$11,475,138 in the previous year. The 1945 earnings were equal to \$3.95 per share, compared with \$5.69 a share in 1944. Shipments in 1945 were \$291,280,701, compared with \$427,136,070 in 1944.

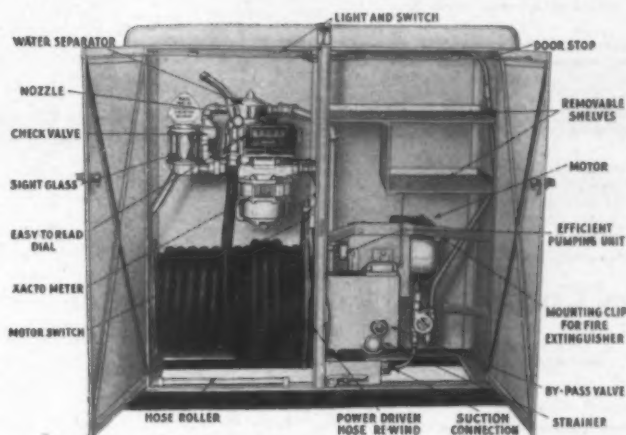
United Aircraft Corp., and its wholly-owned subsidiary, United Aircraft Service Corp., reported a net loss of \$505,921 for the first quarter of 1946. The board of directors declared a dividend of 50c a share on common stock, payable June 15.

Douglas Aircraft Co., reported net income during the first quarter of the 1946 fiscal year of \$1,111,710, equal to \$1.85 per share of common stock. Sales and billings for the three-month period totaled \$19,880,910, more than 55% of which were on the low-return, wartime cost-plus-a-fixed-fee basis. Total costs and expenses for the period were \$18,707,640.

Consolidated Vultee Aircraft Corp., said preliminary figures for the fiscal year ended Nov. 30, 1945, after taxes, indicated net earnings of \$7,028,932, equal to \$4.92 a share on common stock. Sales, including contract termination claims, amounted to \$645,053,838. The Aviation Corporation said preliminary figures for the fiscal year ended Nov. 30,

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TWO SIZES

15-20 g.p.m.

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Attractive, sturdy, above-ground unit fully equipped with modern Bowser fuel handling features for maximum safety, economy and efficiency. Enables the operator to give his customers the type of service that keeps them coming. A practical, compact fuel dispensing and servicing unit for any airport.

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1945, after charges and taxes, indicated a net profit of \$5,746,846, equal to 90c a share. Net sales for the period amounted to \$32,101,772. This compared with a revised net profit for the fiscal period ended Nov. 30, 1944 of \$1,600,000 or 28c per share.

Glenn L. Martin Company's board of directors voted a second quarter dividend of 75c a share payable June 17 to stockholders of record June 7.

Ryan Aeronautical Company's board of directors adopted a policy of declaring dividend payments on a regular quarterly basis, and at the same declared an initial quarterly dividend of 10c per share payable June 10 to stockholders of record May 25. A special dividend of 15c per share, payable under the same conditions, was also announced.

Breeze Corporation's directors declared a dividend of 40c per share on common capital stock, payable June 10 to stockholders of record June 1. This brought the company's dividend payments thus far this year to 80c. Total dividends for 1945 were \$1.60 per share.

Piper Aircraft Corp., has filed a registration certificate with SEC for the sale of 150,000 shares of \$10 par 4½% cumulative convertible preferred stock to boost its operating capital.

Financial Comment

by
I. W. Burnham, II
of

Burnham & Company
Members of New York Stock Exchange

DURING its relatively short history the air transport industry has steadily forced the rate structure down to a level which makes air travel competitive with first-class rail travel. This objective was foremost in the minds of airline traffic managers who believed that the maximum potential traffic could not be developed unless travel by air was competitive on a price basis with other forms of transportation.

Until the beginning of World War II a declining rate policy was a wise one as the growth of air traffic kept pace with the expansion of flight equipment. The increased industrial activity of the war years combined with the urgency and speed of business travel contributed to an expansion in air travel which outstripped the ability of the airlines to accommodate traffic with its war-depleted equipment. Rates were maintained at the pre-war level until the cessation of hostilities when once again a further reduction resumed the pre-war trend.

The most recent cut in passenger rates to .045c per mile was not necessitated by competition, the lack of an adequate market, or the inability to develop revenue. The reduction came at a time when the cost of practically everything in the economy is rising and particularly, the operating costs of the airlines. It has perhaps been a little too early for the air transportation industry to resume the long-term trend in bringing travel rates down to the long-planned irreducible minimum.

Would air travel be any less today with a .05c per mile rate? Would the demand for speed in air transportation be the primary consideration of business travel, rather than the cost? These questions may remain unanswered for the airlines may not reverse the long-term trend of steadily reducing rates.

Leading Aviation Securities (Courtesy of Burnham & Co.)

NEW YORK STOCK EXCHANGE

	1946		Range for 6 Days Ended 5-3-46		Range for 6 Days Ended 5-10-46		Two Weeks Net Change	
	High	Low	High	Low	High	Low		
AIRLINES								
American Airlines	19 1/2	17 1/2	19 1/2	17 1/2	18 1/2	17 1/2	-	1/2
Braniff Airways	24 1/2	24 1/2	25 1/2	24 1/2	25 1/2	24 1/2	-	1/2
Eastern Air Lines	133 1/2	98	129 1/2	120	126 1/2	118	-	1 1/2
National Airlines	34 1/2	24	25 1/2	24 1/2	28	25	+	1 1/2
Northwest Airlines	56 1/2	46	47	45 1/2	51 1/2	45 1/2	+	2 1/2
Pan American Airways	27	19 1/2	20 1/2	19 1/2	20 1/2	19 1/2	-	1/2
Penn.-Central Air	45 1/2	38 1/2	39 1/2	37	39	36 1/2	+	1
Trans. & Western Air	71	48 1/2	54	50	51 1/2	48 1/2	-	2 1/2
United Air Lines	54 1/2	37 1/2	41 1/2	37 1/2	42 1/2	38 1/2	+	1/2
Western Air Lines	35	24 1/2	26	25 1/2	26 1/2	24 1/2	-	1/2
MANUFACTURERS, ETC.								
Aviation Corp.	14 1/2	9 1/2	11 1/2	10 1/2	11 1/2	10 1/2	+	1/2
Aviation Corp. pf.	83 1/2	59 1/2	68	66	66 1/2	62 1/2	+	2 1/2
Beech Aircraft	30 1/2	14 1/2	30 1/2	28	28 1/2	27 1/2	-	1 1/2
Bell Aircraft	35 1/2	24	27 1/2	27 1/2	28 1/2	26 1/2	-	1
Bendix Aviation	58	46 1/2	47 1/2	46 1/2	48 1/2	46 1/2	-	1 1/2
Boeing	35	24 1/2	29 1/2	28 1/2	28 1/2	27	-	2 1/2
Continental Motors	24	17	19	18	19 1/2	18	+	1/2
Curtiss-Wright	12 1/2	7	7 1/2	7 1/2	7 1/2	7	+	1/2
Curtiss-Wright "A"	34 1/2	20 1/2	21 1/2	20 1/2	22 1/2	20 1/2	+	1/2
Douglas Aircraft	108 1/2	86	88 1/2	86	92	86 1/2	+	3 1/2
Grumman Airc. Eng.	52 1/2	42	44 1/2	42 1/2	45 1/2	42 1/2	+	1 1/2
Lockheed Aircraft	45 1/2	31 1/2	33 1/2	31 1/2	33 1/2	31 1/2	+	1 1/2
Martin, Glenn L.	45 1/2	37 1/2	38 1/2	38	39 1/2	37 1/2	+	1 1/2
National Aviation	28 1/2	20 1/2	25	22	23	20 1/2	-	1 1/2
North Am. Aviation	16 1/2	12 1/2	13 1/2	13	13 1/2	12 1/2	-	1/2
Republic Aviation	24 1/2	15 1/2	20 1/2	18	20 1/2	18 1/2	-	1/2
Sperry Corp.	40 1/2	31 1/2	33 1/2	32 1/2	33 1/2	31 1/2	+	1 1/2
United Aircraft	37 1/2	27 1/2	30 1/2	29 1/2	31 1/2	28 1/2	+	1 1/2
Wright Aero.	105	83	87 1/2	84	84 1/2	83	-	1/2

NEW YORK CURB EXCHANGE

AIRLINES							
Colonial Airlines	43	26	31	28 1/2	32	28 1/2	+ 2
Northeast Airlines	21 1/2	16 1/2	17 1/2	14 1/2	17 1/2	16 1/2	- 1 1/2
Pan American Air. war.	14	8	9	8	8 1/2	8 1/2	- 1/2
MANUFACTURERS, ETC.							
Aero Supply 'A'	23 1/2	21	21 1/2	21 1/2	21 1/2	21	- 1/2
Aero Supply 'B'	7 1/2	5 1/2	7 1/2	6 1/2	6 1/2	6 1/2	- 1/2
Air Associates	23 1/2	15	18 1/2	18 1/2	18 1/2	18 1/2	+ 1/2
Air Investors	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	+ 1/2
Air Investors cv. pf.	...	...	...	...	...	...	...
Aireon Mfg.	17 1/2	11 1/2	13 1/2	12 1/2	12 1/2	12	- 1/2
Aireon Mfg. pf.	22 1/2	14 1/2	17 1/2	15 1/2	16 1/2	15 1/2	- 1/2
Aro Equip.	27 1/2	21	24	22 1/2	24 1/2	23	+ 1 1/2
Bellanca Aircraft	9 1/2	6	7	6 1/2	7 1/2	6	- 1/2
Breeze Corp.	31 1/2	21 1/2	27 1/2	27 1/2	27	25 1/2	- 1 1/2
Brewster Aero.	5 1/2	4 1/2	5 1/2	5 1/2	5 1/2	5 1/2	- 1/2
Cessna Aircraft	17 1/2	13 1/2	15 1/2	14 1/2	14 1/2	14 1/2	- 1/2
Fairchild C. & A.	7	5 1/2	7	6 1/2	6 1/2	6 1/2	- 1/2
Fairchild E. & A.	8 1/2	5 1/2	7	6 1/2	6 1/2	6 1/2	- 1/2
Fairchild E. & A. pf.	115	70	96	93	92	92	- 1/2
Irving Air Chute	13 1/2	10 1/2	11 1/2	10 1/2	10 1/2	10 1/2	- 1/2
Menasco Mfg.	8 1/2	7 1/2	8 1/2	7 1/2	7 1/2	7 1/2	- 1/2
Northrop Aircraft	15 1/2	10 1/2	14 1/2	13 1/2	15	14 1/2	+ 1 1/2
Piper Aircraft	15 1/2	7 1/2	11 1/2	10 1/2	11 1/2	10 1/2	+ 1/2
Roosevelt Field	6 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	+ 1/2
Ryan Aero.	10 1/2	7 1/2	8	7 1/2	9 1/2	7 1/2	+ 1 1/2
Solar Aircraft	27	17 1/2	24	23 1/2	27	22 1/2	+ 2 1/2
United Aircraft Prod.	29 1/2	20 1/2	24 1/2	22	23 1/2	20 1/2	- 1/2
Waco Aircraft	9 1/2	6 1/2	7	6 1/2	7	6 1/2	- 1/2

OVER-THE-COUNTER SECURITIES

	May 3, 1946		May 10, 1946	
	Bid	Asked	Bid	Asked
AIRLINES				
Air Cargo Transport	4 1/2	5	4 1/2	5 1/2
Alaska Airlines	9 1/2	10	9 1/2	10
All American Aviation	11 1/2	12	11 1/2	11 1/2
American Overseas Airlines	64	68	63	67
Chicago & Southern Air Lines	26 1/2	27	25 1/2	26 1/2
Continental Air Lines	22 1/2	23 1/2	21 1/2	22 1/2
Delta Air Lines	48 1/2	50	48 1/2	47 1/2
Expreso Aereo	10 1/2	11 1/2	9 1/2	10 1/2
Inland Airlines	9	10 1/2	9	10 1/2
Mid-Continent Air Lines	18	18 1/2	17 1/2	18 1/2
TACA Airways	15 1/2	15 1/2	15 1/2	15 1/2
MANUFACTURERS, ETC.				
Aeronautical Products	...	...	6 1/2	7 1/2
Aeronca	13 1/2	14 1/2	13 1/2	13 1/2
Aircraft & Diesel	2 1/2	2 1/2	2 1/2	2 1/2
Airplane & Marine	15	20	...	20
Central Airports	1 1/2	2 1/2	1 1/2	2 1/2
Columbia Aircraft	...	1 1/2	...	1 1/2
Continental Aviation & Eng.	4 1/2	5 1/2	4 1/2	4 1/2
General Aviation Equip.	2 1/2	3 1/2	3 1/2	3 1/2
Gladson Products	2 1/2	3 1/2	2 1/2	3 1/2
Globe Aircraft	5 1/2	6 1/2	5 1/2	6 1/2
Harlow Aircraft	...	...	...	...
Harvill Corp.	3 1/2	4	3 1/2	3 1/2
Interstate Aircraft & Engine	13	14 1/2	13 1/2	14 1/2
Kellett Aircraft	4 1/2	4 1/2	4 1/2	4 1/2
Liberty Aircraft	24 1/2	27 1/2	24	26 1/2
Luscombe Airplane	3 1/2	4 1/2	3 1/2	4 1/2
McDonnell Aircraft Corp.	8	8 1/2	8	8 1/2
McDonnell Aircraft Corp. pf.	...	...	...	...
Pacific Airmotive	13	14 1/2	13 1/2	14 1/2
Pollak Mfg.	13 1/2	13 1/2	13 1/2	14 1/2
Standard Aircraft Prod.	3 1/2	3 1/2	3 1/2	3 1/2
Taylorcraft	5 1/2	6 1/2	5 1/2	6 1/2
Timm Aircraft	3	3 1/2	2 1/2	3 1/2

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Including
COMMUNICATIONS—NEW EQUIPMENT—AIRPORTS

CAA Will Expedite Carriers' Overhaul Extension Requests

District Inspectors Empowered To Clear Applications

STREAMLINED PROCEDURES for the handling of applications involving extensions of the maximum periods for overhaul of engines and aircraft parts will be placed in effect in the next few weeks by the Civil Aeronautics Administration.

While the basic requirement of filing an application with certain justifying material has been retained, a procedure has been agreed to between CAA and Air Transport Association officials whereby District CAA Inspectors will be able to service these applications immediately and give their approval or disapproval within a few days after the applications are received.

The CAA/Air Carrier Maintenance Section is preparing a bulletin which will furnish its inspectors with new instructions regarding the processing of these applications.

Purpose of the new procedure is to facilitate the means of enabling one airline to take advantage of the more favorable experience of another airline in extending the overhaul period on identical equipment under generally identical operating conditions. This will, it is expected, tend to reduce materially the maintenance and overhaul costs of the airlines.

30-Passenger DC-3 Is Being Converted For PCA By Texas Firm

A 30-passenger conversion of the C-47 (DC-3) will be used by Pennsylvania-Central Airlines on the company's new hourly shuttle between Detroit and Cleveland. Six planes of this record capacity are being converted for PCA by

the Texas Engineering & Mfg. Co., Dallas. Three will be used by PCA on the Lake Erie crossing and the other three are scheduled for lease to Northeast Airlines.

The conversion as worked out by Texas Engineering & Mfg., under a contract let through Executive Transport Co., Dallas, has one row of eight and one row of seven double seats. Although the first plane completed sets aside one of the inside rear seats for the hostess, Temco engineers have stated that they expect to provide a jump seat in the others, permitting thirty cash customers to be carried.

The extra seating was partly possible because meals will not be served on the shuttle runs and it was not necessary to provide for a buffet. However, three thermos jugs will be racked on the bulkhead which separates the main cabin from the rear toilet and washroom. There is a coat closet opposite the rear entrance, and specially designed hatracks without dividers or external supports are located over each row of seats.

Proper balance of the aircraft with a full passenger load is contingent upon carrying at least 700 lbs. of baggage in the forward compartments. Three standard baggage bins are provided and radio shelves have been adjusted to permit location of all equipment above the baggage area.

Power plant for the 30-passenger conversion will be P&W R-1830 engines converted from B-24 use. The initial modification gives a larger than average passenger entrance door by using the front half of a cargo door. Regular airliner doors may be substituted later, however.

TWA Converts C-47

Transcontinental & Western Air is currently converting a C-47 into a flying laboratory to be used at Mills Field, San Francisco for testing radar, engine installations, navigation equipment and various blind flying and traffic control aids.



View VHF Set—Shown checking a set similar to equipment now in use on Pennsylvania-Central Airlines planes are Earl Clark, radio technician, C. P. Blackmon, supervisor of PCA's aircraft communications, and Earl Raymond, superintendent of ground communications. On May 15 PCA started adding VHF to regular low frequency equipment in planes and at ground stations along its routes, claiming to be the first commercial airline to make use of war-developed VHF communications.

CAR Will Be Amended On Icing and Flight Recording Equipment

Two proposed amendments to Civil Air Regulations one pertaining to installation of a flight recording device and the other requiring certain ice eliminating equipment, are being circulated by the Civil Aeronautics Board for comment and opinion prior to enactment into law.

The requirement that a flight recording device be carried on all scheduled aircraft, which was temporarily in force in 1943 and 1944, has been somewhat revised as a result of airline experience with recorders. The new amendment provides that aircraft in scheduled air transportation, after December 1, 1946, "shall be equipped to record continuously during flight the altitude of the aircraft and the vertical accelerations . . . both to be recorded against a time scale of at least two inches to the hour. Such equipment shall be substantially protected from jarring and from fire and shall be located as far back in the fuselage as practical, in any case aft of the most rearward bulkhead."

The ice elimination measure was offered with an expression of concern over the fact that prevalent anti-icing and de-icing "provide only limited protection from the hazards of excessive accumulation of ice on aircraft in flight."

Coated Fiberglass Gaskets

Cylinder head rocker boxes on the Pratt & Whitney Wasp Major will be sealed with silastic-coated Fiberglass gaskets capable of withstanding temperatures up to 500 degrees F. The gaskets, made of a single ply of Fiberglass with a thin silastic coating, are made by the Connecticut Hard Rubber Co., 497 East Street, New Haven 9, Conn.

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General Railway Signal Offers Airway Control

System Utilizes Railroad Track-Circuit Principle

WHILE MOST of the companies now developing all weather flying aids have concentrated their attention on the navigation, instrument landing and airport traffic control aspects, two of the proposals offered at the recent Pentagon conference placed primary importance on the airway traffic control and automatic posting elements of the problem.

The first of these proposals was offered by Teleregister Corp. and consists of a four stage system which was described in detail in *AMERICAN AVIATION*, Nov. 15, 1945. A test installation of the first stage in this system was made by the CAA at Washington National Airport in 1940, and further experimentation has been proposed almost every year since then, only to be postponed when the necessary funds were stricken from the CAA budget.

The second proposal was that of General Railway Signal Co. and was based on that company's long experience in railway signaling, utilizing the equivalent of the track-circuit principle on which all railroad control now is based.

Generally speaking, under the GRS proposal, each airway would be equipped with suitable radio or radar beacons to permit the pilot to follow a defined course. Next the airway would be divided into blocks by phantom walls intersecting it, the length of the blocks ranging from 10 miles or less to 50 miles or more as traffic and physical conditions dictate. The airway would further be divided into 1,000-ft. altitude layers, in effect providing 16 traffic levels between 2,000 and 17,000 ft.

Automatic equipment would be provided on the ground and in each aircraft to determine the occupancy of each block at each altitude. After determining that a particular block was occupied at a particular altitude, the ground station would then signal the occupant as to whether the next block was occupied. These signals could be by means of colored lights similar to railroad cab lights, with green meaning it was all right to proceed, and red meaning the next block was occupied and it would be necessary to hold, or change course or altitude. At the same time a dial would be provided in each aircraft with a distinctive position for each altitude, so that the pilot could look in on other altitudes before changing his own.

The whole GRS plan is based on a closed circuit principle in which provision is made so that failure of a device or part of a system cannot result in an unsafe condition even though it causes delays in traffic. This principle applies to all vital parts of the system—those which effect safety—but in the interest of economy does not apply to non-vital parts. For example, it is conceivable that a manual control can be superimposed by a ground agency so as to give a less favorable indication to the pilot, but it would not be possible to superimpose a manual control to give a more favorable indication than the existing condition.

Equipment, according to GRS, would be relatively simple and inexpensive, while the airborne equipment weight would not be of serious consequence.

While GRS has not as yet released details as to how these results would be effected, it states that its system can be divided into two parts—the traffic control and safety system which represents the latest development in railway traffic control techniques, and the

Seventh of a Series

This is the seventh of a series of articles dealing with all-weather proposals. Another installment will appear in a forthcoming issue of *AMERICAN AVIATION*.

electronic components which are necessary to adapt this traffic control system for airway use.

Basically the system requires the establishment of a chain of relatively low cost ground beacon signal stations along an airway, and the installation of a lightweight transponder beacon and signal indication on each aircraft. Weight of the airborne equipment would be similar to the weight of AN/APN-19 equipment plus signal indicators.

Length of the airway sectors or blocks will be determined by spacing of the ground stations, which will in turn be determined by study of the traffic conditions to be encountered along each portion of an airway. All ground stations will be fully automatic in operation and will be connected together by ground radio links.

In operation, each block station will determine the presence of equipped aircraft at each altitude within the block under its surveillance. This information will be passed continuously and automatically along the airway over the ground radio links. Depending on the occupancy condition at each altitude in a given block, and in the adjacent blocks, each ground station will transmit the proper signal information to aircraft at all altitudes within the block. The exchange of signal information within a given block will take place in a closed sequence, whereby only one aircraft at a time is able to receive signal in-

formation, and consequently clearance to proceed.

As a fundamental principle of the system, an aircraft must show occupancy in a certain region in space before the ground station having surveillance over that region is permitted to send signal information to that region. At the same time, absolute isolation between adjacent regions in space will be accomplished by means of yet undisclosed techniques. Information supplied by the system will further make it possible for the pilot to determine that he can change course or altitude safely as well as proceed along the airway.

Absolute identity of an aircraft by a given ground station has not been considered to be a requisite for the safety features of the system. However, for navigation it has been considered important for each ground station to identify itself to all aircraft, and provisions are being made to give each ground station a distinctive code identification which will be transmitted to the aircraft as part of the signal information. Means have further been provided so that a pilot will know when he has reached a block boundary so that he may hold if necessary within a given block and a given altitude.

Despite the very scant information revealed to date, General Railway Signal Co. is understood to have many of the elements of its proposed system at a high stage of development, and to be planning an experimental airway installation sometime this year. The basic electronic elements for this trial will probably consist of radar beacons similar to the Hazeltine Lanac system combined with the automatic interlocking relay set-up used by GRS in railway traffic control, and in an experimental airport traffic control set-up at LaGuardia Field.



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Hamilton Manufactures New Junior Propeller

Aircraft using engines in the 450-600 horsepower range can now be equipped with a 'junior' version of the constant speed Hydromatic propeller, according to Hamilton Standard Propellers Division of United Aircraft Corp. The smaller propeller, available in diameters from eight feet three inches to ten feet, is virtually the same in design and structural detail as bigger Hydromatics. Blades are of duraluminum alloy.

Tests have been made, using the small Hydromatic propellers on a Beechcraft Model 18, to show considerable improvement in performance, particularly under single engine conditions. With one prop feathered the Beechcraft is reported to have climbed 100 feet per minute faster than with a windmilling constant speed propeller, both at sea level and at 5000 feet, and absolute ceiling was increased by 2400 feet. Drag coefficient of the airplane was reported reduced as much as 12%, and trim and handling characteristic on one engine are said to be considerably improved.

Republic Will Cut Seabee Costs With Auto Equipment

Republic Aviation Corporation's program to cut all cost items on the amphibian Seabee has resulted in the selection of a number of items of standard automotive electrical equipment for fac-



Quick Service For Transient Planes—Representative of a type of maintenance becoming available at many airports for non-scheduled commercial and personal aircraft, this mobile maintenance shop was recently put into service at Washington National Airport by Sky Supply, Inc. The truck is manned by certificated A & E men, carries a variety of replacement parts, and has been fitted with work bench, a complete set of aircraft and engine tools, air compressor, engine cleaning and paint spray equipment, fire and battery equipment, hydraulic fluids, cleaning compounds, several grades of lubricants, etc. Other equipment can be picked up by the truck at the company's shops on the field. Willoughby N. Olfey, president of Sky Supply, reports that the truck is available to itinerant planes either by calling the tower and requesting it in advance of landing, or simply by taxiing to the transient parking line where the truck is generally kept.

tory installation on the aircraft. The auto accessories, to be supplied to Republic by The Electric Auto-Lite Co., Toledo, Ohio, include starting motors, generators, distributors, regulators, batteries, spark plugs, wiring harnesses, tachometer shafts, engine instruments, electric gas gauges and instrument panels.

Republic, in announcing the arrangement with Electric Auto-Lite, stated that utilization of adaptable automotive equipment "is a logical part of Republic's program for reducing the cost of personal airplanes."

Operations-Maintenance Personnel

J. T. Farrah, manager of American Airlines' industrial engineering branch of the engineering department, is now American's aircraft procurement representative at the Boeing Aircraft Co. plant at Seattle. He will represent AA during the construction of eight Boeing Stratocruisers scheduled for delivery in 1947.

Claude D. Richardson, Jr., formerly a major in Air Transport Command, has been appointed director of engineering by TACA Airways.



Pierman Richardson Taylor

Col. H. J. Reid, wartime deputy chief of Army Air Forces' Office of Flying Safety, has been appointed flight operations manager of PCA. James T. Rinker, former PCA pilot and system chief pilot, has been promoted to superintendent of flying, and R. H. Taylor, chief pilot for PCA's military transport division during the war, has been named superintendent of operations control. Murl Estes, recently returned after service with the AAF as military attaché in Chile, is now system chief pilot, and Capt. Casey Pierman has been named western regional pilot based in Detroit. E. W. Hardesty, formerly chief of stations for the system and one-time Detroit station manager, was appointed ground operations manager.

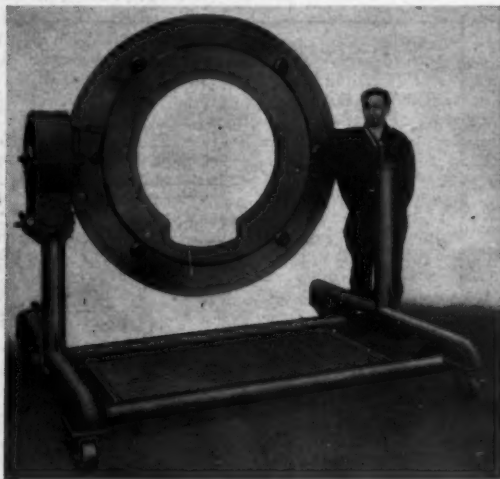
Maj. John G. Tilton, veteran PCA pilot-captain, has rejoined the company after military service. New PCA first officers, all from the Army or Navy, are Capt. James H. Weaver, Capt. Frederick E. Krom Jr., Lt. Frank E. Wunderlich, Capt. Olin F. Grubb, Lt. Roger Jerome Hoy, Lt. (j.g.) Leroy William Heistermann, Capt. Philip N. Bennett Jr., Capt. John M. Morris, Capt. Richard John Gosnell, and Lt. Ernest E. Maulsby, Jr.

Jack M. Hugin, former chief pilot for Northwest Airlines' eastern region, has been named regional chief pilot for the same region.



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New Equipment

Manufacturers and Airlines Get Together On Problem of Passenger Loading Ramps



Manufacturers, airlines and commercial field operators have been quick to realize that with new and larger planes going into regularly scheduled service, there was need for passenger loading ramps to serve all types of commercial planes, regardless of height or location of entrance and exit doors.

Pictured here are both adjustable and non-adjustable ramps designed for various types of four-engine transports.

Above left is an adjustable ramp which Eastern Air Lines will use with its fore and aft loading doors on the DC-4. Suitable for planes with doors from 89 to 136 inches above the ground, it will also be used with the Constellation and the Martin 2-0-2. The ramp weighs 850 pounds and when fully extended has 15 steps, each 36 by 11 inches. A battery-operated lighting system is built into the stand, and brakes are provided on all wheels. The Glenn L. Martin Co. is building the ramp on designs worked out by EAL personnel.

Circular type passenger ramps are also being constructed by the Martin company, several having been designed for



use with the converted Douglas C-54. One 500 lb. version, shown at right above, features top platform adjustable at heights of either 88 or 96 inches. Another version is designed for use at the forward entrance of the C-54, incorporating an additional, removable top-step auxiliary platform.

Below left is a ramp manufactured by Republic Aviation Corp., adopted by American Airlines System for use with

its DC-4 equipment. Structure is steel and exterior is covered with Alclad aluminum. Stairs are illuminated by battery power.

National Airlines is using the loading ramp shown at the right below for Douglas DC-4s and DC-6s. Weight of the 90-inch ramp is about 700 lbs. The designer, Aircraft Mechanics, Inc., is producing 10 of the circular models fitted with hydraulic brakes and lighting system which draws current from the airplane's batteries. Through use of a gate and extension of the top platform, a fork lift may be used for loading food and incidentals without obstructing use of the stairway.

In the bottom photo at right is shown Airquipment Co.'s Aeroramp with self-leveling steps adjustable to any height between 49 and 120 inches. Stair width of the 2000-lb. ramp is 37½ inches. Two handles are located on the right hand skirt at the base—one for pumping the hydraulic mechanism, the other for actuating the floor locks.

Aluminum Hangar Doors

Counterbalanced overhead doors, similar to residential garage doors but requiring no tracks, are now being made of lightweight aluminum. Operating and counterbalancing mechanism is built into the door, and multiple installation across hangar fronts does not require posts or other obstructions between doors. Standard sizes are 8 ft. 6 in. by 10 feet high, and 5 ft. 9 in. by 10 feet high. The door was developed jointly by The Blaw-Knox Co. and the Aluminum Door Corporation of Birmingham, Mich. Aluminum Door Corp. will handle marketing.

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Spaulding Joins ATA

Morrill B. Spaulding, formerly with the Navy Bureau of Aeronautics, has been named as assistant to Director Allen W. Dallas of the Engineering Division of the Air Transport Association of America.

Scandinavians Name Agency

John A. Cairns & Co., New York, has been appointed by the Scandinavian airlines group—DDL (Danish), DNL (Norwegian), and SILA (Swedish Intercontinental Airlines)—to conduct their advertising campaign in North America. Leo Baron will serve as account executive.

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